# Publications of the U.S. Geological Survey, 1997

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#### Publications of the U.S. Geological Survey

This catalog is a list of (1) books and maps<sup>1</sup> that were published during 1997 and (2) articles by U.S. Geological Survey personnel in non-U.S. Geological Survey journals and books that came to our attention in 1997; it supplements the permanent catalogs "Publications of the Geological Survey, 1879–1961," "Publications of the Geological Survey, 1962–1970," and "Publications of the U.S. Geological Survey, 1971 through 1981." These permanent catalogs, as well as some others, are available under the conditions indicated below from USGS Information Services, Box 25286, Federal Center, Denver, CO 80225. The catalogs are also available over the counter at any of the U.S. Geological Survey offices that sell books.

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<sup>&</sup>lt;sup>1</sup>Individual topographic quadrangle maps are not listed; they are shown on State indexes to topographic maps, which are free on application to USGS Information Services, Box 25286, Federal Center, Denver, CO 80225, and to offices where books and maps are sold over the counter. These indexes also show commercial dealers in each State.

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SALT LAKE CITY, Utah—2222 West 2300 South, 2d floor (books and maps available for inspection only)

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#### AVAILABILITY OF PERIODICALS

Subscriptions to the periodical "Preliminary Determination of Epicenters" can be obtained ONLY from the

# Superintendent of Documents U.S. Government Printing Office Washington, DC 20402

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#### CD-ROM's

#### DIGITAL DATA SERIES

The Digital Data Series distributes large amounts of digital data (up to 680MB) through the medium of Compact Disc-Read Only Memory technology. This medium takes advantage of the latest technological advances in digital mass-storage and in the internationally recognized standards (ISO-9660) for CD-ROM's. Full instructions on computer technology required to use each CD-ROM are given with each entry. CD-ROM's in the Digital Data Series are available by mail from: USGS Information Services, Box 25286, Federal Center, Denver, CO 80225.

DDS-0019-R. Geology and resource assessment of Costa Rica at 1:500,000 scale; a digital representation of maps of the U.S. Geological Survey's 1987 folio I-1865, by P. G. Schruben. 1997. One CD-ROM. Release 2.

The minimum system requirements to use the data with the software provided on this disc are: DOS: (1) IBM/PC or compatible personal computer, 80386 or better CPU, with mouse (2) 640 kb of RAM (at least 450 kb of free memory, (3) MS- or PC-DOS version 5.x and (4) Super VGA graphics system, 256 colors; Windows/ArcView 1: (1) IBM/PC or compatible computer, 80386 or better CPU, with mouse, (2) 4 MB of RAM, 8 strongly recommended, (3) Windows 3.x, but not Windows 95, and (4) Super VGA graphics system, 256 colors; Macintosh (including Power Macintosh): (1) System 7.x, with 8 Mb of RAM, and (2) 256-color graphics system.

DDS-0033. WYOMING. 3-D resevoir characterization of the House Creek oil field, Powder River basin, Wyoming, by D. K. Higley, M. P. Pantea and R. M. Slatt. 1997. One CD-ROM.

The minimum system requirements to use the data with the software provided on this disc are: Macintosh: (1) Operating System 7.0 or greater, (2) Minimum of 4 megabytes (MB) RAM, 8 MB or greater is recommended, (3) should you load Mosaic or other WWW software on your hard disk suggested minimum disk space in 3 MB, (4) color monitor 13 inches or larger and CD-ROM driver, and (5) drive and software should support ISO 9660 or HFS standards. OuickTime software must be installed in the Extensions folder within the System folder. PC/DOS and Windows systems: (1) IBM or 100-percent compatible personal computer with a minimum of an 80386 microprocessor, (2) Microsoft or PC-DOS version 3.1 or later, (3) Microsoft Windows version 3.1 or later, (4) Microsoft compatible mouse, (5) although 4 MB of RAM work, 8 MB or greater is recommended, (6) an extended VGA video board with a minimum screen resolution of 640 by 480 pixels and 256 colors, (7) a hard disk drive with a minimum of 10 MB free disk space, and (8) CD-ROM drive and software supporting ISO 9660 standards, WWW browser, image viewer, and QuickTime viewer are required to link HTML text and graphics images.

DDS-0037. Data from selected U. S. Geological Survey National Stream Water-Quality Networks (WQN), by R. B. Alexander, J. R. Slack, A. S. Ludtke, K. K. Fitzgerald, T. L. Schertz, L. I. Briel and K. P. Buttleman. 1996. Two CD-ROMs.

The minimum system requirements to use the data with the software provided on the DOS disc are: (1) IBM or compatible personal computer, (2) 540 KB RAM free, (3) MS- or PC-DOS version 3.1 or higher, (4) Microsoft MSCDEX version 2.1 or later, (5) CD-ROM drive with ISO 9660 driver, (6) Hard disk with at least 1 MB free space, and (7) a color or graphics monitor is NOT needed.

DDS-0039. ALASKA. Volcanoes of the Wrangell Mountains and Cook Inlet region, Alaska; selected photographs, by C. A. Neal and R. G. McGimsey. 1996. One CD-ROM.

The minimum system requirements to use the data with the software provided on this disc are: Macintosh: (1) Macintosh running System 7 or later, (2) 8 megabytes RAM, (3) 13-inch color monitor, and (4) CD-ROM drive. Windows: (1) IBM or compatible personal computer (386 or higher processor), (2) Microsoft Windows 3.1 or higher, (3) 4 megabytes RAM, (4) MS- or PC-DOS version 5.0 or later, (5) VGA color monitor, and (6) CD-ROM drive.

DDS-0040. ALASKA. Volcanoes of the Alaska Peninsula and Aleutian Islands, Alaska; selected photographs, by C. A. Neal and R. G. McGimsey. 1997. One CD-ROM.

The minimum system requirements to use the data with the software provided on this disc are: Macintosh: (1) Macintosh or compatible computer with a 68020 or higher processor (PowerPC recommended), (2) 8 megabytes RAM (16 MB recommended), (3) Apple System Software version 7.0 or later (7.1.2 or later recommended), (4) 13-inch color monitor that can display 256 colors (16.4 million recommended), and (5) CD-ROM drive. Windows: (1) IBM or compatible personal computer with a 386 or higher processor (Pentium recommended), (2) Microsoft Windows 3.1 or higher (Windows 95 or Windows NT recommended), (3) 8 megabytes RAM (16 MB recommended), and (4) VGA color monitor that can display 256 colors (16.4 million recommended), and (5) CD-ROM drive.

DDS-0041. Great Basin geoscience data base, by G. L. Raines, D. L. Sawatsky and K. A. Connors. 1996.

The minimum system requirements to use the data with the software provided on this disc are: (1) IBM or compatible personal computer (386 or higher processor) (2) Microsoft Windows 3.1 or higher, (3) 4 megabytes RAM, (4) MS- or PC-DOS version 5.0 or later, (5) VGA color monitor, and (6) CD-ROM drive.

DDS-0042. NEVADA. Gravity data of Nevada, by D. A. Ponce. 1997. One CD-ROM.

The minimum system requirements to use the data with the software provided on this disc are: Macintosh: (1) Macintosh or compatible computer with a 68020 or higher processor (PowerPC recommended) (2) 8 megabytes RAM (16 MB recommended), (3) Apple System Software version 7.0 or later (7.1.2) or later recommended), (4) 13-inch color monitor that can display 256 colors, and (5) CD-ROM drive. Windows: (1) IBM or compatible personal computer with a 386 or higher processor (Pentium recommended), (2) Microsoft Windows 3.1 or higher (Windows 95 or Windows NT recommended), (3) 8 megabytes RAM (16 MB recommended), (4) VGA color monitor that can display 256 colors, and (5) CD-ROM drive.

DDS-0043. Status of the Sierra Nevada; the Sierra Nevada ecosystem project, by D. C. Erman. 1997. One CD-ROM.

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The minimum system requirements to use the data with the software provided on this disc are: Macintosh: (1) Macintosh or compatible computer with a 68020 or higher processor (PowerPC recommended), (2) 8 megabytes RAM (16 MB recommended), (3) Apple System Software version 7.0 or later (7.1.2 or later recommended), (4) 13-inch color monitor that can display 256 colors (16.7 million recommended), (5) CD-ROM drive, and (6) Adobe Acrobat Reader 3.0 (included on this disc) or higher or other software that can translate PDF files. Windows: (1) IBM or compatible personal computer with a 386 or higher processor (Pentium recommended), (2) Microsoft Windows 3.1 or higher (Windows 95 or Windows NT recommended), (3) 8 megabytes RAM (16.7 MB recommended), (4) VGA color monitor that can display 256 colors (16.7 million recommended), (5) CD-ROM drive, (6) Adobe Acrobat Reader 3.0 (included on this disc) or higher or other software that can translate PDF files.



#### **BOOKS**

#### PROFESSIONAL PAPERS

Professional Papers are mainly comprehensive scientific reports of wide and lasting interest and importance to professional scientists and engineers. Included are reports on the results of resource studies, and of topographic, hydrologic, and geologic investigations. They also include collections of related papers addressing different aspects of a single scientific topic.

- P 1266. ARIZONA. The geology and mechanics of formation of the Fort Rock Dome, Yavapai County, Arizona, by G. S. Fuis. 1996. 95 p., 2 plates in pocket.
- P 1409-C. NEVADA, UTAH. Geochemistry and isotope hydrology of representative aquifers in the Great Basin region of Nevada, Utah, and adjacent states, by J. M. Thomas, A. H. Welch and M. D. Dettinger. 1996. p. C1-C100. 2 plates in pocket, scale 1:500,000 (1 inch = about 8 miles). (Regional Aquifer-System Analysis; Great Basin, Nevada-Utah.)
- P 1410-B. MISSISSIPPI, ALABAMA, GEORGIA, SOUTH CAROLINA. Hydrogeology of the Southeastern Coastal Plain aquifer system in Mississippi, Alabama, Georgia, and South Carolina, by R. A. Renken. 1996. p. B1-B101. 41 plates in pocket. (Regional Aquifer-System Analysis; Southeastern Coastal Plain.)
- P 1410-E. SOUTH CAROLINA, GEORGIA, NORTH CAROLINA. Hydrology of the southeastern Coastal Plain aquifer system in South Carolina and parts of Georgia and North Carolina, by W. R. Aucott. 1996. p. E1-E83. (Regional Aquifer-System Analysis; Southeastern Coastal Plain.)
- P 1410-F. GEORGIA, ALABAMA, SOUTH CAROLINA. Simulation of ground-water flow in southeastern Coastal Plain clastic aquifers in Georgia and adjacent parts of Alabama and South Carolina, by R. E. Faye and G. C. Mayer. 1997. p. F1-F77. 16 plates in pocket. (Regional Aquifer-System Analysis; Southeastern Coastal Plain.)
- P 1412-A. HAWAII. Summary of the Oahu, Hawaii, Regional Aquifer-System Analysis, by W. D. Nichols, P. J. Shade and C. D.

- Hunt, Jr. 1996. p. A1-A61. (Regional Aquifer-System Analysis; Oahu, Hawaii.)
- P 1412-B. HAWAII. Geohydrology of the Island of Oahu, Hawaii, by C. D. Hunt, Jr. 1996. p. B1-B54. (Regional Aquifer-System Analysis; Oahu, Hawaii.)
- P 1412-C. HAWAII. Water budget and the effects of land-use changes on ground-water recharge, Oahu, Hawaii, by P. J. Shade and W. D. Nichols. 1996. p. C1-C38. (Regional Aquifer-System Analysis; Oahu, Hawaii.) (Supersedes Open-file report 94-534.)
- P 1414-A. KANSAS, NEBRASKA, ARKANSAS, COLORADO, MISSOURI, NEW MEXICO, OKLAHOMA, SOUTH DA-KOTA, TEXAS, WYOMING. Analysis of regional aquifers in the central Midwest of the United States in Kansas, Nebraska, and parts of Arkansas, Colorado, Missouri, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming; summary, by D. G. Jorgensen, J. O. Helgesen, D. C. Signor, R. B. Leonard, J. L. Imes and S. C. Christenson. 1996. p. A1-A67. (Regional Aquifer-System Analysis; Central Midwest.)
- P 1421-B. TEXAS. Hydrogeological framework of the Edwards-Trinity aquifer system, west-central Texas, by R. A. Barker and A. F. Ardis. 1996. p. B1-B61. p. B1-B61. 8 plates in pocket. (Regional Aquifer-System Analysis; Edwards-Trinity Aquifer System.)
- P 1423-B. INDIANA, OHIO, MICHIGAN, ILLINOIS. Hydrogeologic framework of the Midwestern Basins and Arches region in parts of Indiana, Ohio, Michigan, and Illinois, by G. D. Casey. 1996. p. B1-B46. 2 plates in pocket. (Regional Aquifer-System Analysis; Midwestern Basins and Arches.)
- P 1546. MONTANA. Geophysical interpretations of the Libby thrust belt, northwestern Montana, by M. D. Kleinkopf, J. E. Harrison and W. D. Stanley. 1997. 22 p., 2 plates in pocket.
- P 1550-A. The Loma Prieta, California, earthquake of October 17, 1989; main-shock characteristics, edited by Paul Spudich, U. S. Geological Survey. 1996. p. A1-A297. p. A1-A297. (Earthquake occurrence; coordinated by W. H. Bakun and W. H. Prescott.)

Synopsis, by Paul Spudich, U.S. Geological Survey. p. A1-A7.

Rupture history of the earthquake from high-frequency strongmotion data, by G. C. Beroza, Stanford University. p. A9-A32.

Source characteristics of the earthquake from global digital seismic data, by G. L. Choy and John Boatwright, U.S. Geological Survey. p. A33-A38.

Comparison of  $L_1$  and  $L_2$  norms in a teleseismic-waveform inversion for the rupture history of the earthquake, by S. H. Hartzell, G. S. Stewart, and Carlos Mendoza, U.S. Geological Survey. p. A39-A57.

Frequency-domain inversion for the rupture characteristics during the earthquake, using strong-motion data and geodetic observations, by S. P. Horton, Lamont-Doherty Earth Observatory; J. G. Anderson, University of Nevada; and A. J. Mendez, GEOEN-VIRON. p. A59-A73.

Broadband study of the source characteristics of the earthquake, by Hiroo Kanamori, California Institute of Technology; and Kenji Satake, University of Michigan. p. A75-A80.

Geodetic measurements of coseismic horizontal deformation, by Michael Lisowski, M. H. Murray, and J. L. Svarc, U.S. Geological Survey. p. A81-A103.

Elevation changes associated with the earthquake and their use to infer fault-slip geometry, by G. A. Marshall and R. S. Stein, U.S. Geological Survey. p. A105-A146.

Main-shock and early aftershock activity, by K. C. McNally, University of California at Santa Cruz; G. W. Simila, California State University; J. G. Brown, University of California. p. A147-A170.

Downdip geometry of the Loma Prieta rupture from teleseismic waveform inversion, by J. L. Nabelek, Oregon State University. p. A171-A182.

Mechanical modeling of a fault-fold system, with application to the earthquake, by Ze'ev Reches, Hebrew University; M. D. Zoback, Stanford University. p. A183-A194.

Are rupture models consistent with geodetic measurements?, by J. H. Steidl and R. J. Archuleta, University of California at Santa Barbara. p. A195-A207.

Long-period surface-wave observations of the earthquake, by A. A. Velasco, Thorne Lay, and Jiajun Zhang, University of California at Santa Cruz. p. A209-A214.

Source parameters of the earthquake, determined by using longperiod seismic waves, by A. A. Velasco, Thorne Lay, and Jiajun Zhang, University of California at Santa Cruz. p. A215-A233.

Strong-motion and broadband teleseismic analysis of the earthquake for rupture process and hazards assessment, by D. J. Wald, T. H. Heaton, U.S. Geological Survey; and D. V. Helmberger, California Institute of Technology. p. A235-A262.

Coseismic displacements measured with the Global Positioning System, by C. R. Williams and Paul Segall, Stanford University. p. A263-A277.

Estimation of the rupture velocity of the main shock from the Love-wave group velocity, by F. T. Wu, State University of New York at Binghamtom. p. A279-A288.

Use of stress-drop models to interpret Geodolite/Global Positioning System and leveling measurements at Loma Prieta, by Wu Mingdong and J. W. Rudnicki, Northwestern University. p. A289-A297.

P 1550-D. CALIFORNIA. The Loma Prieta, California, earthquake of October 17, 1989; aftershocks and postseismic effects, edited by P. A. Reasenberg, U.S. Geological Survey. Prepared in cooperation with the National Science Foundation. 1997. p. D1-D312. (Earthquake occurrence, coordinated by W. H. Bakun and W. H. Prescott)

Aftershocks of the Loma Prieta earthquake and their tectonic implications, by L. D. Dietz and W. L. Ellsworth, U.S. Geological Survey. p. D5-D47.

Response of regional seismicity to the static stress change produced by the Loma Prieta earthquake, by P. A. Reasenberg and R. W. Simpson, U.S. Geological Survey, p. D49-D71.

Spatial variations in stress from the first six weeks of aftershocks of the Loma Preta earthquake, by J. W. Gephart, Cornell University, p. D73-D89.

Loma Prieta aftershock relocation with S-P travel times from a portable array, by S. Y. Schwartz and G. D. Nelson, University of California at Santa Cruz. p. D91-D103.

Empirical Green's function study of Loma Prieta aftershocks; determination of stress drop, by H. Guo, A. Lerner-Lam, W. Menke, Lamont-Doherty Earth Observatory; and S. E. Hough, U.S. Geological Survey. p. D105-D119.

U.S. Geological Survey aftershock ground-motion data, by Leif Wennerberg, U.S. Geological Survey. p. D121-D141.

Response of U.S. Geological Survey creepmeters to the Loma Prieta earthquake, by K. S. Breckenridge and R. W. Simpson, U.S. Geological Survey. p. D143-D178.

Increased surface creep rates on the San Andreas Fault southeast of the Loma Prieta main shock, by Jeff Behr, Roger Bilham, Paul Bodin, University of Colorado; Kate Breckenridge, U.S. Geological Survey; and A. G. Sylvester, University of California at Santa Barbara. p. D179-D192.

Effect of the Loma Prieta earthquake on fault creep rates in the San Francisco Bay region, by J. S. Galehouse, San Francisco State University. p. D193-D207.

Postseismic strain following the Loma Prieta earthquake from repeated GPS measurements, by Roland Bürgmann, University of California; Paul Segal, Stanford University; Mike Lisowski and J. L. Svarc, U.S. Geological Survey. p. D209-D244.

Shallow, postseismic slip on the San Andreas Fault at the north-western end of the Loma Prieta earthquake rupture zone, by John Langbein, U.S. Geological Survey. p. D245-D252.

Models of postseismic deformation and stress transfer associated with the Loma Prieta earthquake, by M. F. Linker, Harvard University and U.S. Geological Survey; and J. R. Rice, Harvard University. p. D253-D275.

A shear strain anomaly following the Loma Prieta earthquake, by M. T. Gladwin, R. L. Gwyther, and R. H. G. Hart, University of Queensland. p. D277-D288.

A magnetotelluric survey of the Loma Prieta earthquake area; implications for earthquake processes and lower crustal conductivity, by R. L. Mackie, T. R. Madden, Massachusetts Institute of Technology; and E. A. Nichols, University of California. p. D289-D312.

- P 1557. HAWAII. The geology and petrology of Mauna Kea Volcano, Hawaii; a study of postshield volcanism, by E. W. Wolfe, W. S. Wise and G. B. Dalrymple. 1997. 129 p., 4 plates in pocket.
- P 1572. NEW HAMPSHIRE. Numerical simulation of ground-water flow through glacial deposits and crystalline bedrock in the Mirror Lake area, Grafton County, New Hampshire, by C. R. Tiedeman, D. J. Goode and P. A. Hsieh. 1997. 50 p.
- P 1574. ALASKA. Geologic studies in Alaska by the U.S. Geological Survey, 1995, edited by J. A. Dumoulin and J. E. Gray, U.S. Geological Survey. 1997. 328 p.

ALASKA. Hydrogeochemistry of mine-drainage waters associated with low-sulfide, gold-quartz veins in Alaska, by R. J. Goldfarb, C. D. Taylor, A. L. Meier, W. M. d'Angelo, and R. M. O'Leary, U.S. Geological Survey. p. 3-17.

ALASKA. Environmental geochemical study of the Nabesna gold skarn and Kennecott strata-bound copper deposits, Alaska, by R. G. Eppinger, S. J. Sutley, and J. B. McHugh, U.S. Geological Survey. p. 19-39.

ALASKA. Mercury in the terrestrial environment, Kuskokwim Mountains region, Southwestern Alaska, by E. A. Bailey and J. E. Gray, U.S. Geological Survey. p. 41-56.

Distinguishing between natural geologic and anthropogenic trace element sources, Denali National Park and Preserve, by L. P. Gough and G. Crock, U.S. Geological Survey. p. 57-71.

ALASKA. Preliminary evaluation of emergent postglacial shorelines, Naknek and Iliamna lakes, Southwestern Alaska, by D. S. Kaufman and K. B. Stilwell, Utah State University. p. 73-81.

ALASKA. Geodetic studies in the Novarupta area, Katmai National Park, Alaska, 1990 to 1995, by J. W. Kleinman, E. Y. Iwatsubo, J. A. Power, and E. T. Endo, U.S. Geological Survey. p. 83-92.

The "Twin Peaks Fault"; not a tectonic or seismogenic structure, by P. J. Haeussler, U.S. Geological Survey; and R. S. Anderson, University of California at Santa Cruz. p. 93-99.

ALASKA. Silver-lead-zinc mineral occurrences in the Howard Pass Quadrangle, Brooks Range, Alaska, by K. D. Kelley, C. D. Taylor, U.S. Geological Survey; and B. A. Cieutat, ERM Southwest. p. 101-110.

ALASKA. Areas favorable for metallic mineral resources and newly discovered mineral occurrences in the Buckstock Mountains area, Southwestern Alaska, by J. E. Gray and P. M. Theodorakos, U.S. Geological Survey. p. 111-123.

Paleocene molybdenum mineralization in the eastern Coast Batholith, Taku River region, and new age constraints on batholith evolution, by L. D. Miller, Echo Bay Mines; R. J. Goldfarb, L. W. Snee, U.S. Geological Survey; W. C. McClelland, University of California at Santa Barbara; and P. D. Klipfel, Placer Dome Exploration. p. 125-135.

ALASKA. Tidal influence on deposition and quality of coals in the Miocene Tyonek Formation, Beluga coal field, upper Cook Inlet, Alaska, by R. M. Flores, G. D. Stricker, U.S. Geological Survey; and R. B. Stiles, DRVEN Corporation. p. 137-156.

ALASKA. Tectono-geophysical domains of interior Alaska as interpreted from new gravity and aeromagnetic data compilations, by R. W. Saltus, U.S. Geological Survey; J. F. Meyer, Jr., Alaska State Division of Oil and Gas; D. F. Barnes and R. L. Morin, U.S. Geological Survey, p. 157-171.

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Leg 1; cadmium, zinc, nickel, copper, lead, manganese, and cobalt in the western North Pacific, by K. J. Orians and Lu Yang. p. 19-36.

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- OF 95-0401. NEW YORK. Comparison of native ground-water quality with water quality in agricultural and residential areas of Long Island, New York, by K. A. Pearsall. Prepared in cooperation with the Nassau County Department of Public Works; Suffolk County Department of Health Services; Suffolk County Water

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- OF 95-0600-A. Preliminary determination of epicenters. Monthly listing for January-March 1995, by National Earthquake Information Center. 1995. 104 p. (NC, Da, M.)
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- OF 95-0600-D. Preliminary determination of epicenters; monthly listing October-December, 1995, by National Earthquake Information Center. 1995. 107 p. (NC, Da, M.)
- OF 95-0601. Earthquake data report, January 1995, by National Earthquake Information Center. 1996. Five 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)
  - The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).
- OF 95-0602. Earthquake data report, February 1995, by National Earthquake Information Center. 1996. Four 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)
  - The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).
- OF 95-0603. Earthquake data report, March 1995, by National Earthquake Information Center. 1996. Four 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)
  - The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file

which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

OF 95-0604. Earthquake data report, April 1995, by National Earthquake Information Center. 1996. Six 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)

The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

OF 95-0605. Earthquake data report, May 1995, by National Earthquake Information Center. 1996. Seven 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)

The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

OF 95-0606. Earthquake data report, June 1995, by National Earthquake Information Center. 1996. Five 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)

The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

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The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

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The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

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The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

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The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

OF 95-0611. Earthquake data report, November 1995, by National Earthquake Information Center. 1997. Five 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)

The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

OF 95-0612. Earthquake data report, December 1995, by National Earthquake Information Center. 1997. Seven 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)

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- OF 95-0685. Digital maps of compositionally classified lithologies derived from 1:500,000 scale geologic maps for the Pacific Northwest; a contribution to the Interior Columbia River Basin Ecosystem Management Project, by G. L. Raines, B. R. Johnson, T. P. Frost and M. L. Zientek. Prepared in cooperation with the U.S. Forest Service; Bureau of Land Management. 1996. 29 p. (NC, Da, S, M; Washington DNR/Div. of Geol. & Earth Resources Library, 1111 Washington St., SE, Olympia, WA 98501; Oregon Dep. of Geol. and Mineral Industries, 800 NE Oregon St., Suite 965, Portland, OR 97232; Idaho Geol. Surv., Morill Hall, Room 332, Univ. of Idaho Campus, Moscow, ID 83843; Montana Bur. of Mines & Geol., Montana Coll. of Mineral. Sci. & Tech., Butte, MT 59701.)
- OF 95-0688. Status and metal content of significant metallic mineral deposits in the Pacific Northwest; a contribution to the Interior Columbia Basin Ecosystem Management Project, by A. A. Brookstrom, M. L. Zientek, S. E. Box, P. D. Derkey, J. E. Elliott, David Frishman, R. P. Ashley, R. C. Evarts, D. B. Stoeser, L. A. Moyer, D. P. Cox and S. D. Ludington. Prepared in cooperation with the U.S. Forest Service; Bureau of Land Management. 1996. 99 p. (NC, Da, M, S; Washington DNR/Div. of Geol. & Earth Resources Library, 1111 Washington St., SE, Olympia, WA 98501; Oregon Dep. of Geol. and Mineral Industries, 800 NE Oregon St. #28, Suite 965, Portland, OR 97232; Idaho Geol. Surv., Morill Hall, Room 332, Univ. of Idaho Campus, Moscow, ID 83843; Montana

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- OF 95-0698. HAWAII. Seismic imaging of Kilauea Volcano and Loihi Seamount; 1994 onshore-offshore experiment data from the Hawaiian Volcano Observatory seismic network, by L. S. Kong, P. G. Okubo, S. C. Webb, F. K. Duennebier, M. A. McDonald, W. C. Crawford and J. A. Hildebrand. 1995. 113 p. (NC, Da, M.)
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- OF 95-0756. HAWAII. A numerical program for steady-state flow of Hawaiian magma-gas mixtures through vertical eruptive conduits, by L. G. Mastin. 1995. 46 p., one 3 1/2 inch DS/HD IBM compatible computer diskette.
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Instrumental neutron activation by long count, by G. A. Wandless. p. 218-227.

Twelve selected trace elements by energy-dispersive X-ray fluorescence spectrometry, by Bi-Shia King. p. 228-235.

Major element analysis by wavelength dispersive X-ray fluorescence spectrometry, by J. S. Mee, D. F. Siems and J. E. Taggart, Jr. p. 236-242.

- OF 96-0526-B. VERMONT. Digital bedrock geologic map of the Weston Quadrangle, Vermont, by N. M. Ratcliffe and W. C. Burton. 1996. Two 3 1/2 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)
- OF 96-0527. LOUISIANA. An environmental and geological bibliography for Lake Pontchartrain, Louisiana, by Clifford Kenwood, F. T. Manheim, C. F. Polloni and S. J. Williams. 1997. 4 p., one CD-ROM. (NC, Da, M.)
- OF 96-0528. WYOMING. Computer spreadsheets for an assessment of in-place gas resources in low-permeability Upper Cretaceous and lower Tertiary sandstone reservoirs, Wind River basin, Wyoming, by R. A. Crovelli, R. H. Balay and R. C. Johnson. 1996. Two 3 1/2 inch DS/HD IBM compatible computer diskettes. (NC, Da, M, U; Geol. Surv. of Wyoming, PO Box 3008, Univ. Station, Laramie, WY 82071.)

Requirements: IBM-PC compatible computer with at least 4 MB of hard disk storage available; Windows 95, Microsoft Word 7.0 for Windows 95, and Microsoft Excel 7.0 for Windows 95; or compatible versions.

OF 96-0529. Assessment of deep conventional and continuous-type (unconventional) natural gas plays in the United States, by T. S. Dyman, J. W. Schmoker and D. H. Root. 1996. 30 p. (NC, Da, M.)

- OF 96-0530. CALIFORNIA. Aeromagnetic map of the central San Francisco Bay area, California. 1996. 1 over-size sheet, scale 1:100,000 (1 inch = about 1.6 miles). (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 96-0531. WASHINGTON. Characterization of acid mine drainage at the Holden Mine, Chelan County, Washington, by J. E. Kilburn and S. J. Sutley. 1996. 47 p. (NC, Da, M, S; Geol. & Earth Resources Div., Dep. of Natural Resources, P.O. Box 47007, Olympia, WA 98504-7007; David A. Johnston, Cascade Volcano Observatory, 5400 MacArthur Blvd., Vancouver, WA 98661.)
- OF 96-0532. National seismic-hazard maps; documentation June 1996, by A. D. Frankel, C. S. Mueller, T. P. Barnhard, D. M. Perkins, E. V. Leyendecker, Nancy Dickman, S. L. Hanson and M. G. Hopper. 1996. 110 p. (NC, Da, M.)
- OF 96-0533. NEVADA, CALIFORNIA. Interpretation of reconnaissance geochemical data from the Bureau of Land Management's Winnemucca District and Surprise Resource Area, Northwest Nevada and Northeast California, by H. D. King. 1996. 36 p., 10 over-size sheets. (NC, Da, M, U; Nevada Bur. of Mines & Geol., Univ. of Nevada-Reno, Reno, NV 89557-0088; Mines & Geol. Library, Dep. of Conservation, 801 K St., Mail Stop 14-34, Sacramento, CA 95814-3532; California Div. of Mines & Geol., State Office Bldg., 107 South Broadway, Los Angeles, CA 90012; and 185 Berry St., Suite 210, San Francisco, CA 94107.)
- OF 96-0535. IDAHO. Geochemical data from the Payette National Forest and contiguous areas, Idaho, by R. T. Hopkins, Jr., J. M. Motooka, J. B. McHugh, K. C. Watts, Jr., H. D. King and H. N. Barton. 1996. 6 p., one 3 1/2 inch IBM compatible computer diskette. (NC, Da, M, U, S; Idaho Geol. Surv., Univ. of Idaho Campus, Morrill Hall, Room 332, Moscow, ID 83843.)
- OF 96-0536. CALIFORNIA. Report for explosion data acquired in the 1994 Los Angeles Region Seismic Experiment (LARSE 94), Los Angeles, California, by J. M. Murphy, G. S. Fuis, Trond Ryberg, D. A. Okaya, E. E. Criley, M. L. Benthien, Marcos Alvarez, Isa Asudeh, W. M. Kohler, G. N. Glassmoyer, M. C. Robertson and Joyjeet Bhowmik. 1996. 120 p. (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 96-0537. IDAHO. Geologic map of part of May Mountain Quadrangle, Lemhi County, Idaho, by R. D. Tysdal. 1996. 1 over-size sheet, scale 1:24,000 (1 inch = 2,000 feet). (NC, Da, M, U, S; Idaho Geol. Surv., Univ. of Idaho Campus, Morrill Hall, Room 332, Moscow, ID 83843.)
- OF 96-0538. UTAH. A paleomagnetic study of the Reunion Subchron in Pliocene lacustrine beds, Beaver Basin, Utah, by J. G. Honey, M. R. Hudson and J. D. Obradovich. 1996. 87 p. (NC, Da, M, U; Utah Geol. Surv., 2363 Foothill Dr., Salt Lake City, UT 84109-1403.)
- OF 96-0540. ALASKA. Alaska Resource Data File; Iditarod Quadrangle, by W. J. Keith and M. L. Miller. 1996. 35 p. (NC, Da, M, A, S; U.S. Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural

- Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 96-0542-A. Geochemical data from Colombia; Part A, General discussion, edited by G. P. Oland and G. J. Orris. U.S. Geological Survey Center for Inter-American Mineral Resource Investigations; Instituto Nacional de Investigaciones Geologico-Mineras. 1996. 13 p. (NC, Da, M.)
- OF 96-0542-B. Geochemical data from Colombia; Part B, Data printout of analytical data, edited by G. P. Oland and G. J. Orris. U.S. Geological Survey Center for Inter-American Mineral Resource Investigations; Instituto Nacional de Investigaciones Geologico-Mineras. 1996. 421 p. (NC, Da, M.)
- OF 96-0542-C. Geochemical data from Colombia; Part C, Data, by G. P. Oland and G. J. Orris. 1996. Three 3 1/2 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)
  - Requirements: The data tables can be imported into most spreadsheet and database programs on IBM PC or compatible computers and on Macintosh computers capable of reading MS DOS diskettes.
- OF 96-0543, FLORIDA. Preliminary paleontologic report on Core T-24, Little Madeira Bay, Florida, by S. E. Ishman, G. L. Brewster-Wingard, D. A. Willard, T. M. Cronin, L. E. Edwards and C. W. Holmes. 1996. 46 p. (NC.)
- OF 96-0544. Pliocene planktic foraminifer census data from DSDP Site 592, Southwest Pacific Ocean, by M. M. Robinson and H. J. Dowsett. 1996. 6 p. (NC, Da, M.)
- OF 96-0545. Planktic foraminifer census data from sites V19-257 and RC17-44, by M. M. Robinson. 1996. 6 p. (NC, Da, M.)
- OF 96-0547. PENNSYLVANIA. Geologic map of the Hellertown Quadrangle, Northampton, Bucks, and Lehigh counties, Pennsylvania, by A. A. Drake, Jr. 1996. 27 p., 1 over-size sheet, scale 1:24,000 (1 inch = 2,000 feet). (NC.)
- OF 96-0549. National overview of abandoned mine land sites utilizing the Minerals Availability System (MAS) and geographic information systems (GIS) technology, by D. A. Ferderer. 1996. 42 p. (NC, Da, M.)
- OF 96-0550. CALIFORNIA. Aeromagnetic map of parts of Los Angeles, San Bernardino, Bakersfield, Long Beach and Santa Ana 1° × 2° quadrangles, California. 1996. 1 over-size sheet, scale 1:250,000 (1 inch = about 4 miles). (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 96-0552. NEVADA. Data on quality of shallow ground water, Las Vegas urban area, Nevada, 1993, by E. G. Neal and P. F. Schuster. National Water-Quality Assessment Program. 1996. 1 over-size sheet. (NC, Da, U, M, Wb; USGS, WRD, 333 West Nye Lane, Room 107, Carson City, NV 89706; 6770 South Paradise Rd., Las Vegas, NV 89119; and Federal Bldg., Room 208, Elko, NV 89801.)
- OF 96-0553. NEVADA, CALIFORNIA. Selected ground-water data for Yucca Mountain region, southern Nevada and eastern California, through December 1995, by R. J. LaCamera, C. L. Westenberg and G. L. Locke. Prepared in cooperation with the

- U.S. Department of Energy, Nevada Operations Office. 1996. 75 p. (NC, Da, M, Wb.)
- OF 96-0554. A modified index for assessment of potential scour at bridges over waterways, by E. J. Doheny. 1996. 16 p. (NC, Da, M, Wb; USGS, WRD, 208 Carroll Bldg., 8600 La Salle Rd., Towswon, MD 21286.)
- OF 96-0555. SOUTH DAKOTA. Hydrologic data for 1994-96 for the Huron Project of the High Plains ground-water demonstration program, by J. M. Carter. Prepared in cooperation with South Dakota State University; Bureau of Reclamation; South Dakota Department of Environment and Natural Resources; City of Huron. 1996. 131 p. (NC, Da, M, Wb; USGS, WRD, 1608 Mt. View Rd., Rapid City, SD 57702.)
- OF 96-0556. FLORIDA. Hydrogeologic assessment of shallow clastic and carbonate rock aquifers in Hendry and Collier counties, southwestern Florida, by C. E. Brown, R. K. Krulikas and D. L. Brendle. Prepared in cooperation with the South Florida Water Management District. 1996. 56 p. (NC, Da, M, Wb; USGS, WRD, Suite 107, 9100 NW 36 St., Miami, FL.)
- OF 96-0557. TENNESSEE. Gaining, losing, and dry stream reaches at Bear Creek valley, Oak Ridge, Tennessee, March and September 1994, by J. A. Robinson and R. L. Mitchell, III. Prepared in cooperation with the U.S. Department of Energy. 1996. 17 p., 1 over-size sheet. (NC, Da, M, Wb; USGS, WRD, 810 Broadway, Suite 500, Nashville, TN 37203; 1013 North Broadway, Knoxville, TN 37917; AgriCenter International, 7777 Walnut Grove Rd., Suite LLB2, Memphis, TN 38120.)
- OF 96-0558. TEXAS. Water-quality assessment of the Trinity River basin, Texas; nutrients in two coastal prairie streams draining agricultural areas, 1994-95, by L. F. Land. 1996. 4 p. (NC, Da, M, Wb.)
- OF 96-0559. NEVADA. Techniques for estimating monthly streamflow at gaged sites and monthly streamflow duration characteristics at ungaged sites in central Nevada, by G. W. Hess and L. R. Bohman. Prepared in cooperation with the U.S. Department of Agriculture; U.S. Forest Service; Toiyabe National Forest. 1996. 15 p. (NC, Da, M, Wb; USGS, WRD, 333 West Nye Lane, Room 107, Carson City, NV 89706; 6770 South Paradise Rd., Las Vegas, NV 89119; and Federal Bldg., Room 208, Elko, NV 89801.)
- OF 96-0560. IOWA. Floods of July 12, 1972, March 19, 1979, and June 15, 1991, in the Turkey River basin, Northeast Iowa, by D. A. Eash and B. A. Koppensteiner. Prepared in cooperation with the Iowa Highway Research Board; Iowa Department of Transportation, Project Development Division. 1996. 54 p. (NC, Da, M, U, Wb; USGS, WRD, 400 South Clinton St., Federal Bldg., Room 269, Iowa City, IA 52244.)
- OF 96-0574. LOUISIANA. Estimation of pier scour and channel stability for highway crossings of the Red River in Louisiana, by J. J. Gilbert and P. A. Ensminger. Prepared in cooperation with the Louisiana Department of Transportation and Development. 1996. 65 p. (NC, Da, M, Wb.)
- OF 96-0575. NEW YORK. Results of specific-capacity tests in Kings and Queens counties, New York, 1919-82, by Anthony Chu. Prepared in cooperation with the New York City Department of Environmental Protection. 1996. 12 p. (NC, Da, M, Wb; USGS, WRD, 425 Jordan Rd., Troy, NY 12180.)

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- OF 96-0578. NEW MEXICO. Water-quality and ground-water-level data, Bernalillo County, central New Mexico, 1995, by D. R. Rankin. Prepared in cooperation with the Bernalillo County Environmental Health Department. 1996. 14 p. (NC, Da, M, Wb; USGS, WRD, 4501 Indian School Rd. NE, Suite 200, Albuquer-que, NM 87110-3929.)
- OF 96-0581. NORTH CAROLINA. Hydrogeologic framework and ground-water resources at Seymour Johnson Air Force Base, North Carolina, by A. P. Cardinell and S. S. Howe. Prepared in cooperation with the U.S. Environmental Protection Agency, Region IV, Atlanta, Georgia. 1997. 21 p. (NC, Da, M, Wb; USGS, WRD, 3916 Sunset Ridge Rd., Raleigh, NC 27607.)
- OF 96-0588. WASHINGTON. Benthic macroinvertebrate communities in the Elwha River basin, 1994-95, by M. D. Munn, M. L. McHenry and V. Sampson. Prepared in cooperation with Lower Elwha Klallam Tribe. 1996. 27 p. (NC, Da, M, Wb.)
- OF 96-0589. FLORIDA. Potentiometric surface of the Upper Floridan Aquifer in the St. Johns River Water Management District and vicinity, Florida, May 1996, by G. G. Phelps, A. M. O'Reilly, L. A. Bradner and Leel Knowles, Jr. Prepared in cooperation with the Saint Johns River Water Management District; South Florida Water Management District; Southwest Florida Water Management District. 1996. 1 over-size sheet. (NC, Da, M, Wb; USGS, WRD, Suite 1006, 224 West Central Pkwy., Altamonte Springs, FL.)
- OF 96-0590. ALABAMA. Potentiometric surface of the Miocene-Pliocene aquifer system of Baldwin County, Alabama, 1995, by J. L. Robinson, R. S. Moreland and A. E. Clark. Prepared in cooperation with the Baldwin County Commission. 1996. 1 over-size sheet. (NC, Da, M, Wb; USGS, WRD, 2350 Fairlane Dr., Suite 120, Montgomery, Al 36116; and 520 19th Ave., Tuscaloosa, AL 35401.)
- OF 96-0591. CALIFORNIA. Summary of suspended-solids concentration data, San Francisco Bay, California, water year 1995, by P. A. Buchanan and D. H. Schoellhamer. Prepared in cooperation with the San Francisco Regional Water Quality Control Board; U.S. Army Corps of Engineers. 1996. 40 p. (NC, Da, M, Wb; USGS, WRD, 2800 Cottage Way, Room W-2233, Sacramento, CA 95825.)
- OF 96-0593. MICHIGAN. A generalized estimate of ground-water-recharge rates in the Lower Peninsula of Michigan, by D. J. Holtschlag. Michigan Basin Regional Aquifer-System Analysis. 1996. 37 p. (NC, Da, M, Wb.)
- OF 96-0594. FLORIDA. Potentiometric surface of the Upper Floridan Aquifer, west-central Florida, May 1996, by J. A. Mattie, P. A. Metz and A. E. Torres. Prepared in cooperation with the Southwest Florida Water Management District. 1996. 1 over-size sheet. (NC, Da, M, Wb.)

- OF 96-0595. FLORIDA. Potentiometric surface of the intermediate aquifer system, west-central Florida, May 1996, by J. A. Mattie, P. A. Metz and A. E. Torres. Prepared in cooperation with the Southwest Florida Water Management District. 1996. 1 over-size sheet. (NC, Da, M, Wb.)
- OF 96-0596. GEORGIA. Verification of the Region 3 urban flood-frequency equations for Tifton, Georgia, by E. J. Inman. Prepared in cooperation with Tift County; City of Tifton, Georgia. 1996. 9 p. (NC, Da, M, Wb.)
- OF 96-0597. FLORIDA. Simulation of ground-water flow at the U.S. Naval Air Station, Jacksonville, Florida, with an evaluation of changes to ground-water movement caused by proposed remedial designs at Operable Unit 1, by J. H. Davis, Michael Planert and W. J. Andrews. Prepared in cooperation with the Department of the Navy. 1996. 47 p. (NC, Da, M, Wb; USGS, WRD, Suite 3015, 227 North Bronough St., Tallahassee, FL.)
- OF 96-0598. OREGON. Ground-water data for the Warm Springs Indian Reservation and contiguous area, north-central Oregon, by D. B. Anderson. Prepared in cooperation with Confederated Tribes of the Warm Springs Reservation. 1996. 66 p., 1 over-size sheet. (NC, Da, M. Wb.)
- OF 96-0599. NEVADA. Summary of data concerning radiological contamination at Well PM-2, Nevada Test Site, Nye County, Nevada, by G. M. Russell and G. L. Locke. Prepared in cooperation with the U.S. Department of Energy. 1997. 84 p. (NC, Da, M, Wb; USGS, WRD, 333 West Nye Lane, Room 107, Carson City, NV 89706; 6770 South Paradise Rd., Las Vegas, NV 89119; and Federal Bldg., Room 208, Elko, NV 89801.)
- OF 96-0600-A. Preliminary determination of epicenters; monthly listing January-March 1996, by National Earthquake Information Center. 1997. (NC, Da, M.)
- OF 96-0601. Earthquake data report, January 1996, by National Earthquake Information Center. 1997. Six 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)
  - The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME.DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).
- OF 96-0602. Earthquake data report, February 1996, by National Earthquake Information Center. 1997. Six 5 1/4 inch DS/HD IBM compatible computer diskettes. (NC, Da, M.)
  - The EDR data are written on 1.2 megabyte, high density, 5 1/4 inch diskettes and are readable by IBM PC or compatible computers running DOS version 2.0 or higher. All files are ASCII and the documentation is given in file AAREADME, DAT on the first disk. Succeeding disks are a continuation of the data file which starts on the first disk. Each disk contains a title page file, named AATPAGEn.DAT, and a data file, OFEDRmmn.DAT, where n is the disk number and mm is a two-character code for the month (JA, FE, MR, etc.).

- OF 96-0614. ARIZONA. Data from synoptic water-quality studies on the Colorado River in the Grand Canyon, Arizona, November 1990 and June 1991, by H. E. Taylor, D. B. Peart, R. C. Antweiler, T. I. Brinton, W. L. Campbell, J. R. Garbarino, D. A. Roth, R. J. Hart and R. C. Averett. Prepared in cooperation with the U.S. Bureau of Reclamation. 1996. 176 p. (NC, Da, M, Wb.)
- OF 96-0615. IDAHO. Quality assurance plan and field methods for quality of water activities, U.S. Geological Survey, Idaho National Engineering Laboratory, Idaho, by L. J. Mann. Prepared in cooperation with U.S. Department of Energy. 1996. 37 p. (NC, Da, M, Wb.)
- OF 96-0616. ARIZONA. Ground-water, surface-water, and water-chemistry data, Black Mesa area, northeastern Arizona, 1995, by G. R. Littin and S. A. Monroe. Prepared in cooperation with the Arizona Department of Water Resources; Bureau of Indian Affairs. 1996. 22 p. (NC, Da, M, U, S, Wb; USGS, WRD, 1940 South 3rd Ave., Yuma, AZ 85364; 1545 West University Dr., Tempe, AZ 85281; and 2255 North Gemini Dr., Bldg. 3, Flagstaff, AZ 86001.)
- OF 96-0618. CALIFORNIA. Surface-water quality-assurance plan for the California District of the U.S. Geological Survey, by R. W. Meyer. 1996. 68 p. (NC, Da, M, Wb; USGS, WRD, 2800 Cottage Way, Room W-2233, Sacramento, CA 95825.)
- OF 96-0619. COLORADO. Water-quality data for Doughty Springs, Delta County, Colorado, 1903-1994, with emphasis on sulfur redox species, by K. M. Cunningham, W. G. Wright, D. K. Nordstrom, J. W. Ball, M. A. Schoonen and Y. Xu. 1996. 69 p. (NC, Da, M, Wb.)
- OF 96-0620. MARYLAND. Potentiometric surface of the Aquia Aquifer in southern Maryland, September 1995, by S. E. Curtin, D. C. Andreasen and F. K. Mack. Prepared in cooperation with Maryland Geological Survey; Resource Assessment Service. 1997. 1 p. (NC, Da, M, Wb; USGS, WRD, 8987 Yellow Brick Rd., Baltimore, MD 21237.)
- OF 96-0621. MARYLAND. Potentiometric surface of the Magothy Aquifer in southern Maryland, September 1995, by S. E. Curtin, D. C. Andreasen and F. K. Mark. Prepared in cooperation with Maryland Geological Survey; Resource Assessment Service. 1997. 1 p. (NC, Da, M, Wb; USGS, WRD, 8987 Yellow Brick Rd., Baltimore, MD 21237.)
- OF 96-0622. MARYLAND. Potentiometric surface of the Upper Patapsco Aquifer in southern Maryland, September 1995, by S. E. Curtin, D. C. Andreasen and F. K. Mack. Prepared in cooperation with Maryland Geological Survey; Resource Assessment Service. 1997. 1 p. (NC, Da, M, Wb; USGS, WRD, 8987 Yellow Brick Rd., Baltimore, MD 21237.)
- OF 96-0623. MARYLAND. Potentiometric surface of the Lower Patapsco Aquifer in southern Maryland, September 1995, by S. E. Curtin, D. C. Andreasen and F. K. Mack. Prepared in cooperation with Maryland Geological Survey; Resource Assessment Service. 1997. 1 p. (NC, Da, M, Wb; USGS, WRD, 8987 Yellow Brick Rd., Baltimore, MD 21237.)
- OF 96-0624. MARYLAND. The difference between the potentiometric surfaces of the Aquia Aquifer of September 1982 and September 1995 in southern Maryland, by S. E. Curtin, D. C. Andreasen and F. K. Mack. Prepared in cooperation with Maryland Geological Survey; Resource Assessment Service. 1997. 1 p.

- (NC, Da, M, Wb; USGS, WRD, 8987 Yellow Brick Rd., Baltimore, MD 21237.)
- OF 96-0625. MARYLAND. The difference between the potentiometric surfaces of the Magothy Aquifer of September 1975 and September 1995 in southern Maryland, by S. E. Curtin, D. C. Andreasen and F. K. Mack. Prepared in cooperation with Maryland Geological Survey; Resource Assessment Service. 1997. 1 p. (NC, Da, M, Wb; USGS, WRD, 8987 Yellow Brick Rd., Baltimore, MD 21237.)
- OF 96-0626. ARIZONA. River-stage data, Colorado River, Glen Canyon Dam to upper Lake Mead, Arizona, 1990-94, by R. W. Gauger. Prepared in cooperation with the Bureau of Reclamation. 1996. 20 p. (NC, Da, M, U, S, Wb; USGS, WRD, 375 South Euclid Ave., Tucson, AZ 85719-6644; 1940 South 3rd Ave., Yuma, AZ 85364; 1545 West University Dr., Tempe, AZ 85281; and 2255 North Gemini Dr., Bldg. 3, Flagstaff, AZ 86001.)
- OF 96-0627. Reconnaissance of 17β-estradiol, 11-ketotestosterone, vitellogenin and gonad histopathology in common carp of United States streams; potential for contaminant-induced endocrine disruption, by S. L. Goodbred, R. J. Gilliom, T. S. Gross, N. P. Denslow, W. B. Bryant and T. R. Schoeb. 1997. 47 p. (NC, Da, M, Wb; USGS, WRD, Placer Hall, Suite 2012, 6000 J St., Sacramento, CA 95819-6129.)
- OF 96-0628. PUERTO RICO. Reconnaissance of ground-water quality in the Manatí Quadrangle, Puerto Rico, August-November 1992, by C. E. Conde-Costas and G. A. Rodríguez-Rodríguez. Prepared in cooperation with the Puerto Rico Environmental Quality Board; Puerto Rico Aqueduct and Sewer Authority; Puerto Rico Department of Natural and Environmental Resources. 1997. 16 p. (NC, Da, M, Wb; USGS, WRD, GSA Ctr., 651 FED-DR, Suite 400-15, Guaynabo, PR 00965.)
- OF 96-0629. CALIFORNIA. Documentation and description of the digital spatial data base for the Southern California Regional Aquifer-System Analysis Program, Santa Clara-Calleguas Basin, Ventura County, California, by S. K. Predmore, K. M. Koczot and K. S. Paybins. Regional Aquifer-System Analysis. 1997. 99 p. (NC, Da, M, Wb; USGS, WRD, 5735 Kearny Villa Rd., Suite O, San Diego, CA 92123; and Placer Hall, 6000 J St., Suite 2012, Sacramento, CA 95819-6129.)
- OF 96-0630. ALASKA. Regional streamflow information in Alaska; an investment in the future, by T. P. Brabets. 1997. 2 p. (NC, Da, M, A, Wb; USGS, WRD, 4230 University Dr., Suite 201, Anchorage, AK 99508-4664; 800 Yukon Dr., Fairbanks, AK 99775-5170; and 641 West Willoughby Ave., Room 202, Juneau, AK 99801.)
- OF 96-0631. MINNESOTA. Physical characteristics of stream subbasins in the Middle Minnesota-Little Cottonwood River basin, south central Minnesota, by C. A. Sanocki. Prepared in cooperation with the Minnesota Department of Transportation. 1996. 13 p., 1 over-size sheet. (NC, Da, M, Wb.)
- OF 96-0632. MINNESOTA, SOUTH DAKOTA. Physical characteristics of stream subbasins in the Hawk Creek-Yellow Medicine River basin, southwestern Minnesota and eastern South Dakota, by C. A. Sanocki. Prepared in cooperation with the Minnesota Department of Transportation. 1996. 21 p., 1 over-size sheet. (NC, Da, M, Wb.)

- OF 96-0648. WYOMING. Ground-water levels in Wyoming, January 1986 through September 1995, by J. P. Mason and S. L. Green. Prepared in cooperation with the Wyoming State Engineer. 1996. 119 p. (NC, Da, M, U, Wb; USGS, WRD, 2617 East Lincolnway, Suite B, Cheyenne, WY 82001-5662.)
- OF 96-0649. LOUISIANA. Flood tracking chart, Amite River basin, Louisiana, by Lawrence Callender, B. E. McCallum and S. R. Brazelton. Prepared in cooperation with the Amite River Basin Drainage and Water Conservation District. 1996. 1 over-size sheet. (NC, Da, M, Wb; USGS, WRD, 3535 South Sherwood Forest Blyd., Suite 120, Baton Rouge, LA 70816.)
- OF 96-0650. TEXAS. Locations and monitoring well completion logs of wells surveyed by U.S. Geological Survey at Air Force Pant 4 and Naval Sir Station, Joint Reserve Base, Carswell Field, Fort Worth area, Texas, by M. D. Williams and E. L. Kuniansky. Prepared in cooperation with the U.S. Air Force Aeronautical Systems Center, Environmental Management Directorate. 1996. 4 p. (NC, Da, M, Wb.)
- OF 96-0651-A. Documentation of a computer program to estimate the head in a well of finite radius using the U.S. Geological Survey modular finite-difference ground-water flow model, by Michael Planert. 1997. 11 p. (NC, Da, M, Wb; USGS, WRD, Suite 3015, 227 North Bronough St., Tallahassee, FL 32301.)
- OF 96-0652. Bibliography of papers on natural gas written by U.S. Geological Survey, Energy Resource Surveys authors; 1990-1995, compiled by T. S. Dyman and S. A. Oscarson. 1996. 28 p. (NC, Da, M.)
- OF 96-0652-A. LOUISIANA. Selected water-quality data for the lower Mississippi River, Bonnet Carré Spillway, and Lake Pontchartrain area, Louisiana, April through June 1994 and 1974-84, by D. K. Demcheck, C. R. Garrison and B. D. McGee. Prepared in cooperation with the U.S. Environmental Protection Agency. 1996. 125 p. (NC, Da, M, Wb.)
- OF 96-0653. UTAH. Active-, inactive-, and abandoned-mine information and selected geochemical data for the State of Utah, by J. L. Ryder. 1996. One 3 1/2 inch DS/HD IBM computer compatible diskette. (NC, Da, M, U; Utah Geol. Surv., 2363 Foothill Dr., Salt Lake City, UT 84109-1403.)
  - Minimum requirements: IBM-PC compatible computer with a minimum of 24 megabytes of hard drive disk space for unarchiving these files and software capable of importing dBase (.DBF) formatted files up to 21.1 megabytes in size.
- OF 96-0653-A. INDIANA. Fish community and habitat data at selected sites in the White River basin, Indiana, 1993-95, by N. T. Baker and J. W. Frey. National Water-Quality Assessment Program. 1997. 44 p. (NC, Da, M, Wb.)
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- OF 96-0657-A. SOUTH CAROLINA, GEORGIA. Selected well data in the vicinity of the Savannah River Site, South Carolina and Georgia, by L. G. Harrelson, W. F. Falls and J. S. Clarke. Prepared in cooperation with the U.S. Department of Energy. 1997. 215 p., 12 over-size sheets. (NC, Da, M, Wb.)
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- OF 96-0683-B. MONTANA. Digital maps and figures on CD-ROM for mineral and energy resource assessment of the Helena National Forest, west-central Montana, by G. N. Green and R. G. Tysdal. 1997. One CD-ROM. (NC, Da, M, U, S; Montana Bur. of Mines & Geol., Montana Coll. of Mineral Sci. & Technol., Butte, MT 59701.)
- OF 96-0685. ALASKA. Alaska Resource Data File; Holy Cross Quadrangle, by W. J. Keith and M. L. Miller. 1996. 4 p. (NC, Da, M, A, S; U.S. Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.) This report is accessible through the USGS www site htlp://www-mrs-ak.wr.usgs.gov/ardf.
- OF 96-0687. ARIZONA. Geochemical characterization of mining districts and mining-related contamination in the Prescott National Forest area, Yavapai County, Arizona; a preliminary assessment of environmental effects, by J. T. Nash, W. R. Riller, J. B. McHugh and A. L. Meier. 1996. 80 p. (NC, Da, M, U; Bur. of Geol. & Mineral Technol., 845 North Park Ave., Tucson, AZ 85719; Tucson Earth Sci. Information Ctr., 340 North 6th Ave., Tucson, AZ 85705-8325.)

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- OF 96-0694. OREGON. Aeromagnetic map of the Scotts Mills area on the Vancouver and Salem 1° x 2° quadrangles, Oregon, by R. F. Sikora. 1996. 1 over-size sheet, scale 1:100,000 (1 inch = 1.6 miles). (NC, Da, M, S; Oregon Dep. of Geol. and Mineral Industries, Suite 965, 800 NE Oregon St. #28, Portland, OR 97232.)
- OF 96-0695. OREGON. Aeromagnetic map of the Roseburg area on parts of the Roseburg, Coos Bay, Medford, and Cape Blanco 1 by 2 quadrangles, Oregon. 1996. 2 over-size sheets, scale 1:100,000 (1 inch = about 1.6 miles). (NC, Da, M, S; Oregon Dep. of Geol. and Mineral Industries, Suite 965, 800 NE Oregon St. #28, Portland, OR 97232.)
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  - Minimum requirements: IBM-PC compatible computer with a minimum of 11.7 megabytes of hard drive disk space for unarchiving these files and software capable of importing dBase (DBF) formatted files up to 7.1 megabytes in size.
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- R. R. Shroba and R. A. Thompson. 1996. 8 p., 1 over-size sheet, scale 1:24,000 (1 inch = 2,000 feet). (NC, Da, M, U; Vicki J. Cowart, Colorado Geol. Surv., 1313 Sherman St., Room 715, Denver, CO 80203; Donald Fawcett, Office of the State Engineer, Ground Water Sect., 1313 Sherman St., Room 818, Denver, CO 80203.)
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- OF 96-0732. FLORIDA. Preliminary report on the distribution of modern fauna and flora at selected sites in north-central and north-eastern Florida Bay, by G. L. Brewster-Wingard, S. E. Ishman, L. E. Edwards and D. A. Willard. 1996. 34 p. (NC, Da, M.)

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NEW MEXICO. Investigation of selected trace-element concentrations and loads in the Rio Grande in the vicinity of Albuquerque, New Mexico, 1994 to 1996, by R. W. Wilcox. p. 60-62.

NEW MEXICO. New Mexico District cooperative program in the middle Rio Grande basin, by D. G. Woodward. p. 63-64.

- OF 97-0118. FLORIDA. Comparison of two methods for estimating discharge and nutrient loads from tidally affected reaches of the Myakka and Peace rivers, west-central Florida, by V. A. Levesque and K. M. Hammett. Prepared in cooperation with the Southwest Florida Water Management District. 1997. 26 p. (NC, Da, M, Wb; USGS, WRD, Suite B-5, 4710 Eisenhower Blvd., Tampa, FL.)
- OF 97-0121. A graphical-user interface for the U.S. Geological Survey modular three-dimensional finite-difference ground-water flow model (MODFLOW-96) using Argus Numerical Environments, by A. M. Shapiro, Joshua Margolin, Shahar Dolev and Yaacov Ben-Israel. 1997. 50 p. (NC, Da, M, Wb.)
- OF 97-0122. IOWA. Floods of September 15-16, 1992, in the Thompson, Weldon, and Chariton river basins, south-central Iowa, by D. A. Eash and B. A. Koppensteiner. Prepared in cooperation with the Iowa Highway Research Board; Iowa Department of Transportation, Project Development Division. 1997. 68 p. (NC, Da, M, U, Wb; USGS, WRD, 400 South Clinton St., Federal Bldg., Room 269, Iowa City, IA 52244.)
- OF 97-0124. IDAHO. Procedures for use of, and drill cores and cuttings available for study at, the Lithologic Core Storage Library, Idaho National Engineering Laboratory, Idaho, by L. C. Davis, S. R. Hannula and Beverly Bowers. Prepared in cooperation with the U.S. Department of Energy. 1997. 29 p. (NC, Da, M, Wb.)

- OF 97-0127. ALASKA. Investigations of gas seeps and springs in the vicinity of The Gas Rocks, south shore Becharof Lake, Alaska, by R. B. Symonds, B. E. Ritchie, R. G. McGimsey, M. H. Ort, R. J. Poreda, W. C. Evans and C. J. Janik. 1997. 27 p. (NC, Da, M, A, S; US Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 Univ. Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0128. Analytical results and comparative overview of geochemical studies conducted at the Holden Mine, spring 1996, by J. E. Kilburn and S. J. Sutley. 1997. 38 p. (NC, Da, M, S; Geol. & Earth Resources Div., Dep. of Natural Resources, PO Box 47007, Olympia, WA 98504-7007; David A. Johnston, Cascade Volcano Observatory, 5400 MacArthur Blvd., Vancouver, WA 98661.)
- OF 97-0129. CALIFORNIA. Ground fracturing at the southern end of Summit Ridge caused by October 17, 1989 Loma Prieta, California, earthquake sequence, by S. Y. Martosudarmo, A. M. Johnson and R. W. Fleming. 1997. 34 p., 5 over-size sheets. (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 97-0132. CALIFORNIA. Stacked wide-angle recordings of airgun signals from the 1994 Los Angeles Region Seismic Experiment (LARSE), California, by T. M. Brocher, S. L. Bilek, R. W. Clayton, G. S. Fuis and D. A. Okaya. 1997. 179 p. (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 97-0133. CALIFORNIA. The Southern California network bulletin; January-December 1996, by L. A. Wald, J. J. Mori and D. J. Wald. 1997. 16 p. (NC, Da, M.)
- OF 97-0136. NEW MEXICO. Evaluation of the potential for debris and hyperconcentrated flows in Capulin Canyon as a result of the 1996 Dome fire, Bandelier National Monument, New Mexico, by S. H. Cannon. 1997. 20 p. (NC, Da, M, U; New Mexico Bur. of Mines & Mineral Resources, Campus Station, Socorro, NM 87801.)
- OF 97-0138. ALASKA. Reconnaissance geologic map of surficial deposits of the Mount McKinley Quadrangle, Alaska, by W. E. Yeend. 1997. One over-size sheet, scale 1:250,000 (1 inch = about 4 miles). (NC, Da, M, A, S; US Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0139. NEVADA. Catalogue of lithologic and stratigraphic information from drill holes on the Nevada Test Site and environs, by H. R. Covington, M. A. Berger and E. C. Jenkins. 1997. 221 p. (NC, Da, M, U; Nevada Bur. of Mines & Geol., Univ. of Nevada-Reno, Reno, NV 89557-0088.)
- OF 97-0140. NEVADA. Digital geologic map database of the Nevada Test Site area, Nevada, by R. R. Wahl, D. A. Sawyer, S. A. Minor, M. D. Carr, J. C. Cole, W. C. Swadley, R. J. Laczniak, R. G. Warren, K. S. Green and C. M. Engle. 1997. 49 p. (NC, Da, M, U;

- Nevada Bur. of Mines & Geol., Univ. of Nevada-Reno, Reno, NV 89557-0088.)
- OF 97-0141. NEW MEXICO. Preliminary evaluation of the landslide potential in Capulin Canyon following the Dome fire, Bandelier National Monument, New Mexico, by S. H. Cannon and W. L. Ellis. 1997. 15 p. (NC, Da, M, U; New Mexico Bur. of Mines & Mineral Resources, Campus Station, Socorro, NM 87801.)
- OF 97-0144. SOUTH CAROLINA. Crosswell radar; a feasibility test at the M-area settling basin, Savannah River Site, South Carolina, by K. J. Ellefsen. 1997. 23 p. (NC, Da, M; South Carolina Geol. & Geodetic Surv., Harbison Forest Rd., Columbia, SC 28210.)
- OF 97-0146. ALASKA. Observations of geothermal activity near Pavlof Volcano on the Alaska Peninsula during March and April of 1996, by Chris Flowers. 1997. 13 p. (NC, Da, M, A, S; US Dep. of the Interior, Alaska Resources Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 974 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0148. SOUTH CAROLINA. Summary of geophysical investigations for DNAPL remediation at Savannah River Site, South Carolina, by K. J. Ellefsen, P. H. Nelson, R. J. Horton and D. L. Wright. 1997: 20 p. (NC, Da, M; South Carolina Geol. & Geodetic Surv., Harbison Forest Rd., Columbia, SC 28210.)
- OF 97-0149. NEW MEXICO. Electrical resistivity survey in the Cornudas Mountains area, Otero County, New Mexico, by D. P. Klein and B. D. Rodriguez. 1997. 25 p. (NC, Da, M, U; New Mexico Bur. of Mines & Mineral Resources, Campus Station, Socorro, NM 87801.)
- OF 97-0151. COLORADO. Source, transport, and partitioning of metals between water, colloids, and bed sediments of the Animas River, Colorado, by S. E. Church, B. A. Kimball, D. L. Fey, D. A. Ferderer, T. J. Yager and R. B. Vaughn. 1997. 135 p. (NC, Da, M, U; Vicki J. Cowart, Colorado Geol. Surv., 1313 Sherman St., Room 715, Denver, CO 80203; Donald Fawcett, Office of the State Engineer, Ground Water Sect., 1313 Sherman St., Room 818, Denver, CO 80203.)
- OF 97-0153. Growth of a tectonic ridge, by R. W. Fleming, A. M. Johnson and J. A. Messerich. 1997. 94 p., 4 over-size sheets. (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 97-0154. Portraying chemical properties of bedrock for water quality and ecosystem analysis; an approach for the New England region, by G. R. Robinson, Jr. 1997. 17 p. (NC.)
- OF 97-0155. SOUTH CAROLINA. Calcareous nannofossil biostratigraphy of the SCDNR test hole C-15, Jasper County, South Carolina, by J. M. Self-Trail and L. M. Bybell. Prepared in cooperation with the South Carolina Department of Natural Resources; U.S. Department of Energy, Savannah River Site. 1997. 2 over-size sheets. (NC; South Carolina Geol. Surv., 5 Geology Rd., Columbia, SC 29210-9998.)
- OF 97-0156-A. ALASKA. Reconnaissance geologic map of the Petersburg A-2 Quadrangle, Southeastern Alaska, by D. A. Brew. 1997. 20 p., 1 over-size sheet, scale 1:63,360 (1 inch = 1 mile).

- (NC, Da, M, A, S; US Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0156-B. ALASKA. Reconnaissance geologic map of the Petersburg A-3 Quadrangle, Southeastern Alaska, by D. A. Brew. 1997. 24 p., 1 over-size sheet, scale 1:63,360 (1 inch = 1 mile). (NC, Da, M, A, S; US Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0156-D. ALASKA. Reconnaissance geologic map of the Petersburg B-2 Quadrangle, Southeastern Alaska, by D. A. Brew. 1997. 21 p., 1 over-size sheet, scale 1:63,360 (1 inch = 1 mile). (NC, Da, M, A, S; US Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0157. WASHINGTON. Geologic map of the Packwood Quadrangle, southern Cascade Range, Washington, by D. A. Swanson, R. B. Moore and N. G. Banks. 1997. 18 p., 2 over-size sheets, sheet 1, scale 1:24,000 (1 inch = 2,000 feet). (NC, Da, M, S; Washington DNR/Geol. & Earth Resources Library, 1111 Washington St., SE, Olympia, WA 98501.)
- OF 97-0158. NEW MEXICO. Environmental geochemistry and processes controlling water chemistry, Cornudas Mountains, New Mexico, by W. R. Miller. 1997. 27 p. (NC, Da, M, U; New Mexico Bur. of Mines & Mineral Resources, Campus Station, Socorro, NM 87801.)
- OF 97-0159. Geologic bibliography for the Atlin, Mount St. Elias, Skagway, and Yakutat quadrangles and adjacent areas of the Yukon and British Columbia, compiled by D. A. Brew. 1997. 23 p. (NC, Da, M, A, S; US Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0160. Digital mineralogy data for 55 types of mineral deposits; Macintosh version, by D. A. Singer, Nichelle Waller, D. L. Mosier and J. D. Bliss. 1997. One 3 1/2 inch DS/HD Macintosh computer compatible diskette. (NC, Da, M.)
  - Requirements for the program are: Any word processor or spreadsheet program that can read text formatted data that is tab delineated, and an Apple Macintosh<sup>TM</sup> computer.
- OF 97-0163. CALIFORNIA. Preliminary geologic map of the San Fernando 7.5' quadrangle, Southern California; a digital database, compiled by R. F. Yerkes. 1997. 11 p. (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 97-0164. CALIFORNIA. Preliminary geologic map of the Mint Canyon 7.5' quadrangle, Southern California; a digital database, compiled by R. F. Yerkes. 1997. 11 p. (NC, Da, M; California Dep.

- of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 97-0165. CALIFORNIA. Preliminary geologic map of the Van Nuys 7.5' quadrangle, Southern California; a digital database, compiled by R. F. Yerkes. 1997. 11 p. (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 97-0166. CALIFORNIA. Preliminary geologic map of the Burbank 7.5' quadrangle, Southern California; a digital database, compiled by R. F. Yerkes. 1997. 11 p. (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 97-0167. ARIZONA. Dating prehistoric tributary debris fans, Colorado River, Grand Canyon National Park, Arizona, with implications for channel evolution and river navigability, by Richard Hereford. Prepared in cooperation with the Bureau of Reclamation. 1997. 17 p. (NC, Da, M, U; Arizona Geol. Surv., 416 West Congress St. #100, Tucson, AZ 85701-1315.)
- OF 97-0168. ALASKA. Alaska Resource Data File; Cold Bay Quadrangle, by F. H. Wilson. 1997. 17 p. (NC, Da, M, A, S; US Dep. of the Interior Alaska Resource Library, 701 "C" St., Box 36, Anchorage, AK 99513; State of Alaska Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0169. ALASKA. Alaska Resource Data File; False Pass Quadrangle, by F. H. Wilson. 1997. 16 p. (NC, Da, M, A, S; US Dep. of the Interior, Alaska Resource Library, 701 "C" St., Box 36, Anchorqage, AK 99513; State of Alaska, Dep. of Natural Resources, Div. of Geol. & Geophys. Surv., 794 University Ave., Suite 200, Fairbanks, AK 99709-3645.)
- OF 97-0170. NORTH CAROLINA. Wrightsville Beach, North Carolina; a digital sidescan-sonar survey, by B. A. Swift, J. F. Denny, W. C. Schwab and E. R. Thieler. 1997. 20 p. (NC, Da, M.)
- OF 97-0173. CALIFORNIA. Whole-rock and mineral chemical compositional data for lower crustal and upper mantle xenoliths from the Cima volcanic field, San Bernardino County, California, by H. G. Wilshire and S. B. Mukasa. 1997. 15 p. (NC, Da, M; California Dep. of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012.)
- OF 97-0177. 1997 flood tracking chart for the Sheyenne River basin, by G. J. Wiche, C. R. Martin, L. L. Albright and G. B. Wald. Prepared in cooperation with the U.S. Army Corps of Engineers; North Dakota State Water Commission; Cass County Joint Water Resource District. 1997. 1 over-size sheet. (NC, Da, M, Wb.)
- OF 97-0193. 1997 flood tracking chart for the Red River of the North basin, by G. J. Wiche, C. R. Martin, L. L. Albright and G. B. Wald. Prepared in cooperation with the U.S. Army Corps of Engineers; National Weather Service; North Dakota State Water Commis-

- sion; Southeast Cass Water Resources District. 1997. 1 over-size sheet. (NC, Da, M, Wb.)
- OF 97-0219. CONNECTICUT. Preliminary hydrogeologic assessment of a ground-water contamination area in Wolcott, Connecticut, by J. R. Stone, G. D. Casey, R. A. Mondazzi and T. W. Frick. Prepared in cooperation with the Town of Wolcott, Connecticut. 1997. 29 p., 8 plates in pocket. (NC, Da, M. Wb.)
- OF 97-0273. Rotatable images of the solid planets and satellites of the solar system (SSGlobes), by R. K. Mark. 1997. One CD-ROM. (NC, Da, M.)
- OF 97-0278. Assignments of U.S. oil and gas reservoirs to U.S. Geological Survey 1995 National Oil and Gas Assessment plays, compiled by R. R. Charpentier and T. R. Klett. 1997. Two 3 1/2 inch DS/HD computer diskettes read by most PC or Macintosh computers. (NC, Da, M.)
- OF 97-0354. TEXAS. Topographic data sets for Texas by river basin, by L. L. Tan. 1997. One CD-ROM. (NC, Da, M, Wb.)
- OF 97-0442-B. Chicxulub impact event; computer animations and paper models, by T. R. Alpha, J. P. Galloway and S. W. Starratt. 1997. One 3 1/2 inch DS/HD Macintosh compatible computer diskette. (NC, Da, M.)
- OF 97-0447-B. The COALPROD database; historical production data for the major coal-producing regions of the conterminous United States, by R. C. Milici. 1997. One 3 1/2 inch DS/HD IBM compatible computer diskette. (NC, Da, M.)
- OF 97-0477. COLORADO, WYOMING. Distribution and quality of potential sources of aggregate infrastructure resources project area, Colorado and Wyoming, by W. H. Langer, G. N. Green, D. H. Knepper, Jr., D. A. Lindsey, D. W. Moore, L. D. Nealey and J. C. Reed, Jr. 1997. One CD-ROM. (NC, Da, M, U; Vicki J. Cowart, Colorado Geol. Surv., 1313 Sherman St., Room 715, Denver, CO 80203; Donald Fawcett, Office of the State Engineer, Ground Water Sect., 1313 Sherman St., Room 818, Denver, CO 80203; Geol. Surv. of Wyoming, PO Box 3008, University Station, Laramie, WY 82071.)
- OF 97-0574. OKLAHOMA. Digital-map grids of mean-annual precipitation for 1961-90, and generalized skew coefficients of annual maximum streamflow for Oklahoma, by A. H. Rea and R. L. Tortorelli. 1997. One 3 1/2 inch DS/HD IBM compatible computer diskette. (NC, Da, M, Wb.)



## THEMATIC MAPS AND CHARTS

# GEOLOGIC QUADRANGLE MAPS

Multicolor geologic maps on topographic bases in 7 1/2- or 15-minute quadrangle units; scales mainly 1:24,000 or 1:62,500; show bedrock, surficial, or engineering geology. Maps are accompanied by brief texts and some maps by structure and columnar sections also.

GQ-1734. VIRGINIA, MARYLAND. Geologic map of the Falls Church Quadrangle, Fairfax and Arlington counties and the City of Falls Church, Virginia, and Montgomery County, Maryland, by A. A. Drake, Jr. and A. J. Froelich. 1997. Lat 38°52'30" to 39°, long

- $77^{\circ}07^{\circ}30^{\circ}$  to  $77^{\circ}15^{\circ}$ . Scale 1:24,000 (1 inch = 2,000 feet). Sheet 51 by 40 inches (in color.)
- GQ-1765. NEVADA. Geologic map of the Rose Valley Quadrangle, Lincoln County, Nevada, by M. G. Best and V. S. Williams. 1997. Lat 37°52'30" to 38°, long 114°15' to 114°22'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 43 by 34 inches (in color).
- GQ-1770. NEVADA. Geologic map of the Riverside Quadrangle, Clark County, Nevada, by V. S. Williams, R. G. Bohannon and D. L. Hoover. 1997. Lat 36°37'30" to 36°45', long 114°07'30" to 114°15'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 39 by 55 inches (in color).
- GQ-1771. CONNECTICUT. Surficial geologic map of the Old Mystic Quadrangle, New London County, Connecticut, by Richard Goldsmith and J. W. Gaffney. Prepared in cooperation with the State of Connecticut, Geological and Natural History Survey. 1997. Lat 41°22'30" to 41°30', long 71°52'30" to 72°. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 44 by 34 inches (in color).

### GEOPHYSICAL INVESTIGATIONS MAPS

Maps on topographic or planimetric bases; various scales; show results of surveys using geophysical techniques, such as gravity, magnetic, seismic, or radioactivity, which reflect subsurface structures that are of economic or geologic significance. Many maps are correlated with the geology.

GP-1015. NEVADA, CALIFORNIA. Aeromagnetic and gravity anomaly maps of the southwestern Nevada volcanic field, Nevada and California, by A. E. McCafferty and V. J. Grauch. 1997. Lat 36°15' to 37°30', long 115°45' to 117°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 39 by 55 inches (in color).

# MISCELLANEOUS INVESTIGATIONS SERIES MAPS

Maps on planimetric or topographic bases; regular and irregular areas; various scales; a wide variety of format and subject matter. The series also includes 7 1/2-minute quadrangle photogeologic maps on planimetric bases which show geology as interpreted from aerial photographs. Series also includes maps of Mars and the Moon.

- I-1910. SOUTH DAKOTA, WYOMING. Geologic map of the Black Hills area, South Dakota and Wyoming, by Ed DeWitt, J. A. Redden, D. P. Buscher and A. B. Wilson. 1997. Lat 43°07'30" to 45°, long 103° to 104°52'30". Scale 1:250,000 (1 inch = about 4 miles). Sheet 50 by 41 1/2 inches (in color).
- I-2234. WYOMING. Geologic maps and petrochemistry of the Precambrian rocks of the Reese Mountain-Hightower SW and Potato Creek areas, Albany and Platte counties, Wyoming, by G. L. Snyder, D. F. Siems, G. A. Wandless, L. D. Nealey, A. J. Bartel and E. L. Brandt. 1997. Three sheets. Sheet 1, lat 42° to 42°30', long 105°12'30" to 106°30'; sheet 2, lat 41°52'30" to 42°15', long 105° to 105°37'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 1, 57 by 42 inches (in color); sheet 2, 56 by 41 inches; sheet 3, 34 by 49 inches
- I-2365(MC-26). Revised shaded relief map and controlled color photomosaic of the Argyre Quadrangle (MC-26) of Mars. Prepared for the National Aeronautics and Space Administration. 1996. Two sheets. Lat -65° to -30°, long 0° to 60°. Scale 1:4,336,000 (1 mm = 4.336 km) at -30° latitude Lambert Conformal Conic projection. Sheet 1, 34 by 30 inches; sheet 2, 33 by 26 inches (both in color).

- I-2366(MC-28). Revised shaded relief map and controlled color photomosaic of the Hellas Quadrangle (MC-28) of Mars. Prepared for the National Aeronautics and Space Administration. 1996. Two sheets. Lat -65° to -30°, long 240° to 300°. Scale 1:4,336,000 (1 mm = 4.336 km) at -30° latitude Lambert Conformal Conic projection. Sheet 1, 34 by 30 inches; sheet 2, 33 by 26 inches (both in color).
- I-2367(MC-29). Revised shaded relief map and controlled color photomosaic of the Eridania Quadrangle (MC-29) of Mars. Prepared for the National Aeronautics and Space Administration. 1996. Two sheets. Lat -65° to -30°, long 180° to 240°. Scale 1:4,336,000 (1 mm = 4.336 km) at -30° latitude Lambert Conformal Conic projection. Sheet 1, 34 by 30 inches; sheet 2, 33 by 26 inches (both in color).
- I-2368(MC-25). Revised shaded relief map and controlled color photomosaic of the Thaumasia Quadrangle (MC-25) of Mars. Prepared for the National Aeronautics and Space Administration. 1996. Two sheets. Lat -65° to -30°, long 60° to 120°. Scale 1:4,336,000 (1 mm = 4.336 km) at -30° latitude Lambert Conformal Conic projection. Sheet 1, 34 by 30 inches; sheet 2, 33 by 26 inches (both in color).
- I-2440. ARIZONA. Breccia-pipe and geologic map of the northeastern part of the Hualapai Indian Reservation and vicinity, Arizona, by K. J. Wenrich, G. H. Billingsley and P. W. Huntoon. Prepared in cooperation with the U.S. Bureau of Indian Affairs; Hualapai Tribe. 1997. 2 sheets. Lat 35°52'30" to 36°17'30", long 112°45' to 113°22'30". Scale 1:48,000 (1 inch = 4,000 feet). Sheet 1, 57 by 42 inches; sheet 2, 56 by 41 inches (both in color). (Accompanied by 19 page text.)
- I-2453. VERMONT. Bedrock geologic map of the Jamaica and part of the Townshend quadrangles, Windham and Bennington counties, Vermont, by N. M. Ratcliffe. 1997. Two sheets. Lat 43° to 43°07'30", long 72°40' to 72°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 1, 36 by 43 inches; sheet 2, 58 by 41 inches (both in color).
- I-2459. Geologic map of the Perrine (Jg-2) and Nun Sulci (Jg-5) quadrangles of Ganymede, by G. E. McGill, S. W. Squyres and S. J. Uzman. Prepared for the National Aeronautics and Space Administration. 1997. Lat 21°S to 66°N, long 270°E to 90°W. Scale 1:5,000,000 (1 mm = 5 km) at 30° and 58° latitude Lambert Conformal Projection. Sheet 54 by 38 inches (in color).
- I-2479. NEVADA, UTAH. Geologic map of the Ursine-Panaca Summit-Deer Lodge area, Lincoln County, Nevada, and Iron County, Utah, by V. S. Williams, M. G. Best and J. D. Keith. 1997. Lat 37°45' to 38°, long 114° to 114°15'. Scale 1:50,000 (1 inch = about 4,200 feet. Sheet 54 by 37 inches (in color). Digital files of geologic map data in DXF format can be downloaded via "anonymous ftp" from greenwood.cr.usgs.gov (136.177.48.5).
- I-2495. OHIO, VIRGINIA, WEST VIRGINIA. Stratigraphic framework of Cambrian and Ordovician rocks in the central Appalachian Basin from Fayette County, Ohio, to Botetourt County, Virginia, by R. T. Ryder, J. E. Repetski and A. G. Harris. 1996. Sheet 56 by 40 inches (in color).
- I-2500. WYOMING. Geologic map of the Cody 1° x 2° quadrangle, northwestern Wyoming, compiled by W. G. Pierce. 1997. Lat 44° to 45°, long 108° to 110°. Scale 1:250,000 (1 inch = about 4 miles).

- Sheet 35 by 34 inches (in color). Supersedes Miscellaneous Field Studies Map MF-963.
- I-2502. SOUTH CAROLINA. Geology of the Pringletown, Ridgeville, Summerville, and Summerville Northwest 7.5-minute quadrangles, Berkeley, Charleston, and Dorchester counties, South Carolina, by R. E. Weems, E. M. Lemon, Jr. and M. S. Nelson. 1997. Two sheets. Lat 33° to 33°15', long 80°07'30" to 80°22'30". Sheet 1, scale 1:24,000 (1 inch = 2,000 feet); sheet 2, scale 1:48,000 (1 inch = 4,000 feet). Sheet 1, 41 by 53 inches; sheet 2, 41 1/2 by 54 inches (both in color). (Accompanied by 9 page text.)
- I-2505. FLORIDA. Maps showing sedimentary and biological environments, depth to Pleistocene bedrock, and Holocene sediment and reef thickness from Molasse Reef to Elbow Reef, Key Largo, south Florida, by B. H. Lidz, E. A. Shinn, M. E. Hansen, R. B. Halley, M. W. Harris, S. D. Locker and A. C. Hine. Prepared in cooperation with the University of South Florida. 1997. Three sheets. Lat 25°04' to 25°12', long 80°16' to 80°20'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 1, 38 by 56 inches; sheet 2, 58 by 38 inches; sheet 3, 58 by 39 inches (all in color).
- I-2529. COLORADO. Geologic map of the southern part of the Piceance Creek basin, northwestern Colorado, by W. J. Hail, Jr. and M. C. Smith. 1997. Lat 39°15' to 39°45', long 107°45' to 108°45'. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 57 by 34 inches (in color).
- I-2530. KENTUCKY, VIRGINIA. Stratigraphic framework of Cambrian and Ordovician rocks in the central Appalachian Basin from Campbell County, Kentucky, to Tazewell County, Virginia, by R. T. Ryder, J. E. Repetski and A. G. Harris. 1997. Lat 35° to 41°, long 75° to 86°. Sheet 48 by 41 inches (in color).
- I-2533. MISSOURI, ILLINOIS. Bedrock geologic map of the St. Louis 30' x 60' quadrangle, Missouri and Illinois, compiled by R. W. Harrison. 1997. 2 sheets. Lat 38°30' to 39°, long 90° to 91°. Sheet 1, scale 1:100,000 (1 inch = about 1.6 miles); sheet 2, scale 1:250,000 (1 inch = about 4 miles). Sheet 1, 38 by 41 inches; sheet 2, 44 by 28 inches (both color). (Accompanied by 7 page text.)
- I-2534(JG-3). Geologic map of the Galileo Region Quadrangle (Jg-3) of Ganymede, by J. R. Underwood, Jr., Ruggero Casacchia, Alex Woronow and M. J. Teeling. Prepared for the National Aeronautics and Space Administration. 1997. Lat 21° to 66°, long 90° to 180°. Scale 1:5,000,000 (1 mm = 5 km) at 30° latitude Lambert Conformal Projection. Sheet 48 by 34 inches (in color).
- I-2540-A. NEW JERSEY. Bedrock geologic map of northern New Jersey, by A. A. Drake, Jr., R. A. Volkert, D. H. Monteverde, G. C. Herman, H. F. Houghton, R. A. Parker and R. F. Dalton. Prepared in cooperation with the New Jersey Geological Survey. 1996. 2 sheets. Sheet 1, lat 40°37'30" to 41°15', long 74° to 75°7'30". Sheet 1, scale 1:100,000 (1 inch = about 1.6 miles). Sheet 1, 58 by 41 inches; sheet 2, 56 by 40 inches (both in color). (Accompanied by 6 page text.)
- I-2541. ARIZONA. Interpretive map and guide to the volcanic geology of Chiricahua National Monument and vicinity, Cochise County, Arizona, by J. S. Pallister, E. A. du Bray, U.S. Geological Survey; and D. B. Hall, University of Arizona. Prepared in cooperation with the U.S. National Park Service. 1997. Lat 31°57' to 32°04', long 109°17' to 109°24'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 57 by 41 inches (in color). (Accompanied by 11 page text.)

- I-2546. NEVADA. Geologic maps showing structural modes in the Goshute Mountains and Toano Range, Elko County, Nevada, by K. B. Ketner. 1997. Lat 40°32'30" to 41°52'30", long 114°15' to 114°22'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 49 by 39 inches (in color).
- I-2562. NEW HAMPSHIRE. Bedrock geologic map of Hubbard Brook experimental forest and maps of fractures and geology in roadcuts along Interstate 93, Grafton County, New Hampshire, by C. C. Barton. 1997. 2 sheets. Sheet 1, lat 43°55' to 43°58', long 71°41' to 71°48'. Sheet 1, scale 1:12,000 (1 inch = 1,000 feet). Sheet 1, 42 by 27 inches; sheet 2, 49 by 31 inches (both in color).
- I-2566. WISCONSIN, MICHIGAN. Bedrock geologic map of the Ashland and the northern part of the Ironwood 30° x 60° quadrangles, Wisconsin and Michigan, by W. F. Cannon, L. G. Woodruff, S. W. Nicholson and C. A. Hedgman. 1996. Lat 46°15' to 47°, long 90° to 91°. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 41 by 58 inches (in color).
- I-2567. WYOMING. Geologic map of Precambrian rocks along part of the Hartville Uplift, Guernsey and Casebier Hill quadrangles, Platte and Goshen counties, Wyoming, by P. K. Sims, W. C. Day, G. L. Snyder, A. B. Wilson and Z. E. Peterman. 1997. Lat 42°15' to 42°22'30", long 104°35' to 104°45'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 31 by 32 inches (in color). (Accompanied by 18 page text.)
- I-2583-B. ILLINOIS, INDIANA, KENTUCKY. Map showing earthquake intensities in the vicinity of the lower Wabash Valley, Illinois, Indiana, and Kentucky, by Susan Rhea, R. L. Wheeler and M. G. Hopper. 1996. Lat 36°30' to 39°, long 87° to 89°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 38 by 49 inches (in color). (Accompanied by 6 page text.)
- I-2587-A. Satellite image map Pakistan. 1997. Lat 24° to 37°, long 79° to 61°. Scale 1:2,000,000 (1 inch = about 32 miles) Lambert conformal conic projection. Standard parallels: 26° and 34°N. Everest spheroid. Sheet 40 by 38 inches (in color).
- I-2587-B. Satellite image map N.W. Frontier, Pakistan. 1997. Lat 32°25' to 37°20', long 73°45' to 69°05'. Scale 1:500,000 (1 inch = about 8 miles) Lambert conformal conic projection. Standard parallels: 26° and 34°N. Everest spheroid. Sheet 37 by 50 inches (in color).
- I-2587-C. Satellite image map Northern Areas, Pakistan. 1997. Lat 32°25' to 37°20', long 78°20' to 73°45'. Scale 1:500,000 (1 inch = about 8 miles) Lambert conformal conic projection. Standard parallels: 26° and 34°N. Everest spheroid. Sheet 37 by 50 inches (in color).
- I-2587-D. Satellite image map N.W. Balochistan, Pakistan. 1997. Lat 27°40' to 30°25', long 66°15' to 60°50'. Scale 1:500,000 (1 inch = about 8 miles) Lambert conformal conic projection. Standard parallels: 26° and 34°N. Everest spheroid. Sheet 49 by 31 inches (in color).
- I-2587-E. Satellite image map N.E. Balochistan, Pakistan. 1997. Lat 27°40' to 32°25', long 70°45' to 66°15'. Scale 1:500,000 (1 inch = about 8 miles) Lambert conformal conic projection. Standard parallels: 26° and 34°N. Everest spheroid. Sheet 37 by 49 inches (in color).
- I-2587-F. Satellite image map Punjab, Pakistan. 1997. Lat 27°40' to 32°25', long 75°25' to 70°45'. Scale 1:500,000 (1 inch = about 8

- miles) Lambert conformal conic projection. Standard parallels: 26° and 34°N. Everest spheroid. Sheet 38 by 49 inches (in color).
- I-2587-G. Satellite image map S.W. Balochistan, Pakistan. 1997. Lat 25° to 27°40′, long 66°15′ to 60°50′. Scale 1:500,000 (1 inch = about 8 miles) Lambert conformal conic projection. Standard parallels: 26° and 34°N. Everest spheroid. Sheet 49 by 31 inches (in color).
- I-2587-H. Satellite image map Sindh, Pakistan. 1997. Lat 23°40' to 27°40', long 71°30' to 66°15'. Scale 1:500,000 (1 inch = about 8 miles) Lambert conformal conic projection. Standard parallels: 26° and 34°N. Everest spheroid. Sheet 50 by 37 inches (in color).
- I-2591. COLORADO. Late Quaternary surface faulting on the Cheraw Fault, southeastern Colorado, by A. J. Crone, M. N. Machette, Lee-Ann Bradley and S. A. Mahan. 1997. Lat 38° to 40°, long 103° to 105°. Sheet 44 by 34 inches (in color). (Accompanied by 7 page text.)
- I-2599. IDAHO. Geologic map of the western Salmon River Mountains, Valley and Idaho counties, west-central Idaho, by Karen Lund, M. A. Kuntz, C. A. Manduca, C. H. Gammons, K. V. Evans, R. G. Tysdal, G. R. Winkler and J. J. Connor. 1997. Lat 44°45' to 45°30', long 115°15' to 116°15'. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 58 by 42 inches.
- I-2603. COLORADO. Correlation of Lower, Middle, and some Upper Jurassic rocks from Salter Canyon to Stoner in southwestern Colorado, by R. B. O'Sullivan. 1997. Sheet 35 1/2 by 33 1/2 inches.
- I-2604. MONTANA. Geologic map of the Jeff Davis Peak Quadrangle and the eastern part of the Everson Creek Quadrangle, Beaverhead County, Southwest Montana, by J. W. M'Gonigle and M. H. Hait, Jr. 1997. Lat 44°52'30" to 45°, long 113°07'30" to 113°50'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 41 1/2 by 56 1/2 inches.

### **GEOLOGIC INVESTIGATIONS SERIES**

In August 1996, the I-map series name was changed from Miscellaneous Investigations Series Maps to Geologic Investigations Series. All geologic maps approved for publication after August 1996 will be published in the Geologic Investigations Series. The series definition remains the same.

- I-2545. NEBRASKA, COLORADO. Geologic map of the Scottsbluff 1° x 2° quadrangle, Nebraska and Colorado, by J. B. Swinehart and R. F. Diffendal, Jr. Prepared in cooperation with the Conservation and Survey Division, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln. 1997. Lat 41° to 42°, long 102° to 104°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 42 by 33 inches (in color).
- I-2547. UTAH. Geologic map of the central Escalante Desert area, Iron County, Utah, by V. S. Williams. 1997. Lat 37°45' to 38°, long 113°30' to 113°45'. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 43 by 34 inches (in color).
- I-2583-C. ILLINOIS, INDIANA, KENTUCKY. Map showing selected wells and geophysical survey and modeling lines in the vicinity of the lower Wabash Valley, Illinois, Indiana, and Kentucky, by R. L. Wheeler, S. F. Diehl, Susan Rhea, U.S. Geological Survey; M. L. Sargent, Illinois State Geological Survey; and G. W. Bear, Indiana University. Prepared in cooperation with the Illinois Basin Consortium (Illinois State, Indiana, and Kentucky Geological Surveys). 1997. Lat 36°30' to 39°, long 87° to

- 89°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 36 by 50 inches. (Accompanied by 16 page text.)
- I-2589. CONNECTICUT. Sidescan sonar image, surficial geologic interpretation, and bathymetry of the Long Island Sound sea floor off Norwalk, Connecticut, by D. C. Twichell, U.S. Geological Survey; R. N. Zajac, University of New Haven; L. J. Poppe, U.S. Geological Survey; R. S. Lewis, Connecticut Geological and Natural History Survey; VeeAnn Cross, U.S. Geological Survey; David Nichols, U.S. Geological Survey; and M. L. DiGiacomo-Cohen, Connecticut Geological and Natural History Survey. Prepared in cooperation with the State of Connecticut, Department of Environment Protection, Geological and Natural History Survey and the University of New Haven. 1997. Two sheets. Lat 40°59' to 41°04', long 73°16' to 73°20'. Scale 1:15,000 (1 inch = 1,250 feet). Sheet 1, 46 1/2 by 37 1/2 inches; sheet 2, 54 by 31 inches.
- I-2600-F. Coastal-change and glaciological map of the Bakutis coast, Antarctica; 1972-1990, by Charles Swithinbank, Scott Polar Research Institute; R. S. Williams, Jr., J. G. Ferrigno, B. A. Seekins, B. K. Lucchitta, and C. E. Rosanova, U.S. Geological Survey. Prepared in cooperation with the Scott Polar Research Institute, University of Cambridge, U.K. 1997. Lat 78°S to 73°S, long 105°W to 130°W. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 42 by 30 inches (in color). (Accompanied by 9 page text.)
- I-2609. UTAH, SOUTH DAKOTA. Cretaceous stratigraphy in a northeast-trending transect, northern Utah to south-central South Dakota, by E. A. Merewether, J. C. Dolson, W. B. Hanson, W. R. Keefer, B. E. Law, R. E. Mueller, T. A. Ryer, A. C. Smith, D. P. Stilwell and D. M. Wheeler. 1997. Two sheets. Sheet 1, 42 by 32 inches; sheet 2, 25 by 20 inches. (Accompanied by 10 page text.)
- I-2616. UTAH, COLORADO. Correlation of the Middle Jurassic San Rafael Group from Bluff, Utah, to Cortez, Colorado, by R. B. O'Sullivan. 1997. Sheet 42 by 37 inches.

### CIRCUM-PACIFIC MAP SERIES

Multicolor equal-area maps at scales of 1:10,000,000 for the Northwest, Northeast, Southwest, Southeast quadrants of the Pacific and the Arctic and Antarctic regions, and of 1:17,000,000 for the whole Pacific Basin. The series consists of base, geographic, geodynamic, plate-tectonic, geologic, tectonic, mineral-resources, and energy-resources maps, as well as other miscellaneous maps.

CP-45. Circum-Arctic map of permafrost and ground-ice conditions, by J. Brown, International Permafrost Association; O. J. Ferrians, Jr., U.S. Geological Survey; J. A. Heginbottom, Geological Survey of Canada; and E. S. Melnikov, Institute for Hydrogeology and Engineering Geology. Prepared with the cooperation and assistance of Circum-Pacific Council for Energy and Mineral Resources, Circum-Pacific Map Projections. 1997. Lat 10° to 90°, long 0° to 0°. Scale 1:10,000,000 (1 inch = about 160 miles). Sheet 58 by 41 inches (in color).

# OIL AND GAS INVESTIGATIONS CHARTS

Charts show stratigraphic information for certain oil and gas fields and other areas having hydrocarbon potential.

OC-0146-A. WYOMING. Stratigraphy and correlation of Cretaceous and Paleocene rocks, northern Wind River basin, Wyoming, by W. R. Keefer. Prepared in cooperation with the U.S. Depart-

- ment of Energy; Shoshone and Arapaho tribes of the Wind River Reservation; U.S. Bureau of Indian Affairs. 1997. 2 sheets. Lat 42°30' to 43°45', long 107° to 110°. Sheet 1, 40 by 56 inches; sheet 2, 57 by 42 inches (sheet 2 in color).
- OC-0146-B. WYOMING. Stratigraphy and correlation of Cretaceous and Paleocene rocks, west-central Wind River basin, Wyoming, by W. R. Keefer and R. C. Johnson. Prepared in cooperation with U.S. Department of Energy; Shoshone and Arapaho tribes of the Wind River Reservation; U.S. Bureau of Indian Affairs. 1997. Two sheets. Sheet 1, 56 by 39 inches; sheet 2, 57 by 36 inches.

#### MISCELLANEOUS FIELD STUDIES MAPS

Multicolor or black and white maps on topographic or planimetric bases; quadrangle or irregular areas; various scales. Pre-1971 maps show bedrock geology in relation to specific mining or mineral-deposit problems; the majority of post-1971 maps are preliminary black and white maps on various subjects such as environmental studies or Wilderness mineral investigations.

- MF-1994-E. MISSOURI, ARKANSAS. Cross sections showing stratigraphic and depositional lithofacies of Upper Cambrian rocks and the relation of lithofacies to potential for mississippi valley-type mineralization in the Harrison 1° x 2° quadrangle, Missouri and Arkansas (folio of the Harrison 1° x 2° quadrangle, Missouri and Arkansas), by T. S. Hayes, J. R. Palmer, W. P. Pratt, G. W. Krizanich, J. W. Whitfield and C. M. Seeger. Prepared in cooperation with the Missouri Department of Natural Resources, Division of Geology and Land Survey; Arkansas Geological Commission. 1997. Horizontal scale 1:500,000 (1 inch = about 8 miles); vertical scales 1:2,400 and 1:1,200 (1 inch = 2,000 and 1,000 ft). Sheet 53 by 39 inches. (Accompanied by 10 page text.)
- MF-1994-F. MISSOURI, ARKANSAS, KANSAS, OKLAHOMA. Maps showing locations of known mississippi valley-type deposits and occurrences in the Ozark Mountains region relative to Late Cambrian shaly lithofacies and other shales, Missouri, Arkansas, Kansas, and Oklahoma and Oklahoma (folio of the Harrison 1° x 2° quadrangle, Missouri and Arkansas), by J. R. Palmer, Missouri Division of Geology and Land Survey; and T. S. Hayes, U.S. Geological Survey. Prepared in cooperation with the Missouri Department of Natural Resources, Division of Geology and Land Survey; Arkansas Geological Commission; Kansas Geological Survey. 1997. Lat 36° to 39°, long 90° to 96°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 56 by 36 inches. (Accompanied by 13 page text.)
- MF-2312-D. COLORADO. Geologic map of the Russell Quadrangle, Costilla County, Colorado, by A. R. Wallace. 1997. Lat 37°30' to 37°37'30", long 105°15' to 105°22'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 39 by 40 inches.
- MF-2312-E. COLORADO. Geologic map of the Fort Garland Quadrangle, Costilla County, Colorado, by A. R. Wallace. 1997. Lat 37°22'30" to 37°30', long 105°22'30" to 105°30'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 33 by 31 1/2 inches.
- MF-2316. OREGON. Geologic map of the Tims Peak Quadrangle, Malheur County, Oregon, by J. G. Evans and W. J. Keith. 1996. Lat 43°37'30" to 43°45', long 117°45' to 117°52'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 49 by 34 inches.
- MF-2317. OREGON. Geologic map of the Monument Peak Quadrangle, Malheur County, Oregon, by J. G. Evans. 1996. Lat

- 43°37'30" to 43°45', long 117°52'30" to 118°. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 52 by 41 inches.
- MF-2320. ARIZONA. Geologic map of the Arivaca Quadrangle and vicinity, Pima and Santa Cruz counties, Arizona, by H. D. Drewes. 1997. Lat 31°30' to 31°37'DP, long 111°15' to 111°22'30". Scale 1:24,000 (1 inch = 2,000 feet). Sheet 57 by 39 inches (in color).
- MF-2321. COLORADO. Geologic map of the Texas Mountain Quadrangle, Rio Blanco County, Colorado, by B. E. Barnum, R. W. Scott, Jr. and M. P. Pantea. 1997. Lat 39°45' to 39°52'30", long 108°45' to 108°52'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 32 by 36 inches.

#### HYDROLOGIC INVESTIGATIONS ATLASES

Multicolored or black and white maps on topographic or planimetric bases presenting a wide range of geohydrologic data; both regular and irregular areas.

- HA-0738-A. MONTANA, IDAHO. Geologic history and hydrogeologic units of intermontane basins of the Northern Rocky Mountains, Montana and Idaho, by L. K. Tuck, D. W. Briar and D. W. Clark. 1996. Two sheets. Lat 44° to 49°, long 111° to 115°. Scale 1:750,000 (1 inch = about 12 miles). Sheet 1, 37 by 43 inches; sheet 2, 40 by 30 inches (both in color.)
- HA-0738-B. MONTANA, IDAHO. Ground-water levels in intermontane basins of the Northern Rocky Mountains, Montana and Idaho, by D. W. Briar, S. M. Lawlor, M. A. Stone, D. J. Parliman, J. L. Schaefer and Eloise Kendy. 1996. Lat 44° to 49°, long 111° to 117°. Scale 1:750,000 (1 inch = about 12 miles). Sheet 36 1/2 by 40 inches (in color).
- HA-0739. MISSISSIPPI. Susceptibility of ground water to surface and shallow sources of contamination in Mississippi, by C. G. O'Hara. Prepared in cooperation with the Mississippi Department of Environmental Quality Office of Pollution Control; Mississippi Department of Agriculture and Commerce, Bureau of Plant Industry. 1996. 4 sheets. Lat 30° to 35°, long 88° to 90°. Sheets 3 and 4, scale 1:500,000. Sheets 36 by 48 inches (all in color).



## **OUTSIDE PUBLICATIONS**

### ARTICLES AND REPORTS

Articles by USGS personnel in non-USGS publications recently cited in the GeoRef data base of the American Geological Institute are listed below. Non-USGS personnel who share authorship in articles with USGS personnel are indicated by an asterisk (\*) immediately following the name. These publications are not available from the U.S. Geological Survey.

- OP-1. D. H. Abbott\*, Rebecca Drury\* and W. D. Mooney. Continents as lithological icebergs; the importance of buoyant lithospheric roots. Earth and Planetary Science Letters. v. 149, no. 1-4, June 1997. p. 15-27.
- OP-2. L. D. Abbott\*, E. A. Silver\*, R. S. Anderson\*, Randall Smith\*, J. C. Ingle\*, S. A. King\*, D. W. Haig\*, E. E. Small\*, Joseph Galewsky\* and W. V. Sliter. Measurement of tectonic surface uplift rate in a young collisional mountain belt. Nature (London). v. 385, no. 6616, February 6, 1997. p. 501-507.

- OP-3. N. A. Abrahamson\* and K. M. Shedlock. Overview. Seismological Research Letters. v. 68, no. 1, February 1997. p. 9-23.
- OP-4. William Acevedo and P. M. Masuoka\*. Time-series animation techniques for visualizing urban growth. Computers & Geosciences, in Exploratory cartographic visualization. (A. M. MacEachren, editor and others). v. 23, no. 4, May 1997. p. 423-435.
- OP-5. J. C. Adamski and A. L. Pugh. Occurrence of pesticides in ground water of the Ozark Plateaus Province. Water Resources Bulletin. v. 32, no. 1, February 1996. p. 97-105.
- OP-6. T. A. Ager, J. V. Matthews, Jr.\* and W. E. Yeend. ALASKA. Pliocene terrace gravels of the ancestral Yukon River near Circle, Alaska; palynology, paleobotany, paleoenvironmental reconstruction and regional correlation. Quaternary International, *in* Tertiary Quaternary boundaries. (T. A. Ager, editor and others). 22-23, 1994. p. 185-206.
- OP-7. T. A. Ager, J. M. White\* and J. V. Matthews, Jr.\* (editors). Tertiary Quaternary boundaries. Quaternary International. 22-23, 1994. 241 p.
- OP-8. G. R. Aiken, D. M. McKnight, R. A. Harnish and R. L. Wershaw. Geochemistry of aquatic humic substances in the Lake Fryxell basin, Antarctica. Biogeochemistry (Dordrecht). v. 34, no. 3, 1996. p. 157-188.
- OP-9. H. M. Aktan\*, Takaaki Kagawa\*, A. Kambhatla\* and Mehmet Celebi. Measured and analytical response of a pile supported building. Proceedings of the World Conference on Earthquake Engineering, *in* Proceedings of the Tenth world conference on earthquake engineering. 10, Vol. 3, 1992. p. 1791-1796.
- OP-10. G. V. Albino. Porphyry copper deposits of the Great Basin; Nevada, Utah, and adjacent California. Arizona Geological Society Digest, *in* Porphyry copper deposits of the American Cordillera. (F. W. Pierce, editor and others). 20, 1995. p. 267-296.
- OP-11. R. B. Alexander, T. L. Schertz, A. S. Ludtke, K. K. Fitzgerald and L. I. Briel. Stream water-quality data from selected U. S. Geological Survey national monitoring networks on CD-ROM, *in* Proceedings of Watershed '96; a national conference on Watershed management. (U. S. Environmental Protection Agency and others). Fairfax, VA: Tetra Tech, 1996. p. 447-450.
- OP-12. C. M. Allen\*, J. L. Wooden, K. A. Howard, D. A. Foster\* and R. M. Tosdal. CALIFORNIA. Sources of the Early Cretaceous plutons in the Turtle and West Riverside mountains, California; anomalous Cordilleran interior intrusions. Journal of Petrology. v. 36, no. 6, December 1995. p. 1675-1700.
- OP-13. C. N. Alpers, D. K. Nordstrom and J. W. Ball. CALIFOR-NIA. Solubility of jarosite solid solutions precipitated from acid mine waters, Iron Mountain, California, USA. Sciences Géologiques (Bulletin), *in* Thermodynamique des processus naturels; Contributions au premier symposium international (Thermodynamics of natural processes; contributions to the first international symposium). (B. Fritz, editor). v. 42, no. 4, 1989. p. 281-298.
- OP-14. E. R. Anderman\*, M. C. Hill and E. P. Poeter\*. Two-dimensional advective transport in nonlinear regression; sensitivities and uncertainty of plume-front observations, in Proceedings 1994 Groundwater modeling conference. (J. W. Warner, editor

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- and others). Fort Collins, CO: Colorado State University, 1994. p. 55-62.
- OP-15. R. F. Anderson\*, D. N. Edgington\*, J. A. Robbins\*, S. M. Colman, K. A. Orlandini\*, M. P. Gustin\*, J. V. Klump\* and L. Z. Granina\*. Uranium-series disequilibrium, sedimentation, diatom frustules, and paleoclimate change in Lake Baikal; discussion and reply. Earth and Planetary Science Letters. v. 148, no. 1-2, April 1997. p. 395-404.
- OP-16. R. R. Anderson\*, B. J. Witzke\* and D. J. Roddy. The drilling of the 1991-1992 Geological Survey Bureau and U. S. Geological Survey Manson impact structure research cores. Special Paper Geological Society of America, *in* The Manson impact structure, Iowa; anatomy of an impact crater. (Christian Koeberl, editor and others). 302, 1996. p. 45-88.
- OP-17. R. Y. Anderson\* and W. E. Dean. Filling the Delaware Basin; hydrologic and climatic controls on the Upper Permian Castile Formation varved evaporite, in The Permian of northern Pangea; Volume 2, Sedimentary basins and economic resources. (P. A. Scholle, editor and others). Berlin: Springer-Verlag, 1995. p. 61-78.
- OP-18. S. R. Anderson, M. J. Liszewski and D. J. Ackerman. IDAHO. Thickness of surficial sediment at and near the Idaho National Engineering Laboratory, Idaho. Report no. DOE/ID-22128, June 23, 1996. 22 p. Available from: National Technical Information Service, (703)487-4650, order number DE96014158NEG, Springfield, VA, United States.
- OP-19. B. J. Andraski. NEVADA. Soil-water movement under natural-site and waste-site conditions; a multiple-year field study in the Mojave Desert, Nevada. Water Resources Research. v. 33, no. 8, August 1997. p. 1901-1916.
- OP-20. D. C. Andreasen\* and W. B. Fleck. Use of bromide-chloride ratios to differentiate potential sources of chloride in a shallow, unconfined aquifer affected by brackish-water intrusion. Hydrogeology Journal. v. 5, no. 2, 1997. p. 17-26.
- OP-21. Karin Andreassen\*, P. E. Hart and M. E. MacKay\*. Amplitude versus offset modeling of the bottom simulating reflection associated with submarine gas hydrates. Marine Geology, *in* Gas in marine sediments, geology/geochemistry/microbiology. (T. C. van Weering, editor and others). v. 137, no. 1-2, February 1997. p. 25-40.
- OP-22. D. J. Andrews and Yehuda Ben-Zion\*. Wrinkle-like slip pulse on a fault between different materials. Journal of Geophysical Research, B, Solid Earth and Planets. v. 102, no. 1, January 10, 1997. p. 552-571.
- OP-23. E. D. Andrews. Sediment transport in the Colorado River basin, in Colorado River ecology and dam management. (U. S. National Research Council, Water Science and Technology Board, Commission on Geosciences, Environment, and Resources). Washington, DC: National Academy Press, 1991. p. 54-74.
- OP-24. A. K. Armstrong. NEW MEXICO. Facies, diagenesis, and mineralogy of the Jurassic Todilto Limestone Member, Grants uranium district, New Mexico. Bulletin - New Mexico Bureau of Mines & Mineral Resources. Report no. 153, 1995. 43 p.
- OP-25. R. L. Armstrong\* and P. L. Ward. Late Triassic to earliest Eocene magmatism in the North American Cordillera; implica-

- tions for the Western Interior Basin. Special Paper Geological Association of Canada, *in* Evolution of the Western Interior Basin. (W. G. Caldwell, editor and others). 39, 1993. p. 49-72.
- OP-26. J. G. Arth\* and R. A. Ayuso. VERMONT. The Northeast Kingdom Batholith, Vermont; geochronology and Nd, O, Pb, and Sr isotopic constraints on the origin of Acadian granitic rocks. Memoir Geological Society of America, *in* The nature of magmatism in the Appalachian Orogen. (A. K. Sinha, editor and others). 191, 1997. p. 1-18.
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## **ABSTRACTS**

Abstracts are condensed but informative summaries of presentations made at meetings of scientific and professional organizations. Typically they summarize the principal conclusions of an author's current work but contain little supporting data. Non-USGS personnel who share authorship in abstracts with USGS personnel are indicated by an asterisk (\*) immediately following the name. These publications are not available from the U.S. Geological Survey.

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### ABBREVIATIONS USED

А-	Antarctic Geologic Map	MR-	Mineral Investigations Resources Map
В	Bulletin	MSB	Miscellaneous and Special Books
С	Circular	OC-	Oil and Gas Investigations Chart
C-	Coal Investigations Map	OM-	Oil and Gas Investigations Map
CAT	Catalog	OF	Open-File Report
CF	Coal Map	OP	Outside Publication
CP-	Circum-Pacific Map Series	P	Professional Paper
DDS-	Digital Data Series	PB-,ADA	Report available only through the National Technical
EV	Earthquakes and Volcanoes		Information Service
FS	Fact Sheet	PDE	Preliminary Determination of Epicenters
GN	General Interest Publication	SGM	Special Geologic Map
GP-	Geophysical Investigations Map	SGMI	Geologic Map Index
GQ-	Geologic Quadrangle Map	SM	Special Map
HA-	Hydrologic Investigations Atlas	STM	State Geologic Map
HUM	Hydrologic Unit Map	TWI	Techniques of Water-Resources Investigations
I-	Miscellaneous or Geologic Investigations	w	Water-Supply Paper
	Series Map	WRI	Water-Resources Investigations Report
L-	Land Use and Land Cover Map	YR	Yearbook
MF-	Miscellaneous Field Studies Map		·

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Senske, D. A. OP-1412, 1455, Sepulveda, Nicasio WRI 95-4235 Seramur, K. C. OP-855, 1549 Sergeev, A. F. OF 94-0230 Severson, G. R. OF 95-0433 Severson, M. J. OP-48, 371 Severson, R. C. OP-1961 Sforzi, Andrea OP-740 Shade, P. J. P 1412-A, 1412-C; WRI 96-4238 Shanks, W. C., III OP-986, 1242, 1877, 1962 Shanley, J. B. OP-219, 856, 1556, 1557, 1963 Shanley, K. W. OP-857, 1964 Shapiro, A. M. OF 97-0121; OP-Shapiro, S. D. OP-1905 Sharma, Pankaj OP-1405 Sharma, S. K. OP-55 Sharman, G. F. OP-1959 Sharp, R. V. OP-1017 Sharp, W. D. P 1574; OP-859 Sharpe, S. E. OP-279 Shaw, D. R. OP-860, 1985 Shawe, D. R. OF 96-0009 Shedlock, K. M. OP-3, 861 Shedlock, R. J. OP-511 Sheehan, P. M. P 1579 Sheehan, T. P. OF 96-0084 Sheets, R. A. OP-1905 Shengli, Ma OP-657 Sheppard, R. A. OF 96-0697 Sherman, C. E. OP-1697 Sherrod, D. R. OP-76, 179, 339, 1957 Sherwood, C. R. OP-1290, 1760, 1965 Sherwood, D. A. WRI 96-4043, 96-4054 Shields, Gordon OP-1990 Shiffer, D. M. OF 96-0412 Shigaeva, T. D. OF 94-0230 Shimizu, Hiroshi OP-630 Shindel, H. L. OP-862, 863 Shinn, E. A. I-2505; OP-864, 1430, 1491, 1631, 1632, 1966, 1967 Shinohara, Hiroshi OP-1968 Shirey, S. B. OP-692 Shoemaker, C. S. OP-758, 865, 1969, 1970, 1971, 1972 Shoemaker, E. M. OP-342, 620, 699, 758, 865, 916, 1015, 1585, 1888, 1890, 1969, 1970, 1971, 1972, 1973 Sholar, T. M. OP-405 Shpikerman, V. I. OF 96-0513-A Shroba, R. R. OF 96-0717, 96-0718; OP-206 Sibley, P. K. OP-150 Sibley, S. F. OP-120 Sibray, S. S. OP-337 Siderov, A. A. OF 96-0513-A Siebe, Claus OP-1400, 1534 Siegel, D. I. OP-137 Siems, D. F. OF 94-0230, 96-0525; I-2234 Signell, R. P. OP-497, 866, 1627, 1974, 1975 Signor, D. C. P 1414-A Sikora, R. F. OF 95-0812-A, 95-0812-B, 96-0694 Silberling, N. J. B 2151 Silberman, M. L. OP-207, 2140 Silva, R. W. OP-1358, 1495, 1976 Silva, S. R. WRI 96-4167; OP-81, 1556, 1557, 1977

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